OPHTHALMOLOGY

ORAL HISTORY SERIES

A Link With Our Past

An Interview with

Dohrmann Kaspar Pischel, MD

OPHTHALMOLOGY

ORAL HISTORY SERIES

A Link With Our Past

Dohrmann Kaspar Pischel
November 22, 1895 — July 21, 1988

Portrait painted by G. Sheppard, 1975.
Located in the Pischel Library,
Pacific Presbyterian Medical Center, San Francisco.

Dohrmann Kaspar Pischel, MD

American Links with Germanic Ophthalmology
Retinal Detachment Surgery
San Francisco

An Interview Conducted by
Sally Smith Hughes, PhD
1987

With Introductions by
Jerome W. Bettman, MD
and
Ernest W. Denicke, MD

The Foundation of the American Academy of Ophthalmology, San Francisco
Regional Oral History Office, University of California at Berkeley

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CATALOG CARD

PISCHEL, Dohrmann Kaspar (1895–1988) Ophthalmic surgeon

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Ophthalmology Oral History Series
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Kaspar Pischel's (father) Germanic medical training, emigration to United States, and San Francisco ophthalmology practice; Barkan family and eye, ear, nose, and throat specialization in San Francisco; First and Second Viennese Eye Clinics; Dohrmann family; early surgical career at University of California and Stanford; early medical and surgical treatments of retinal detachment; retinal detachment surgery by Jules Gonin, Karl Lindner, Karl Safar, Kaspar and Dohrmann Pischel; Pischel and Walker retinal pins; eyeball shortening operations; advances in ophthalmology; discussion of Pischel surgical papers; Gerd Meyer-Schwickerath and photocoagulation; cryotherapy in retinal detachment surgery; Division of Ophthalmology, Stanford Medical School; Stanford Medical School's move to Palo Alto; membership and offices in medical societies; teaching medical students and residents.

Introductions by Jerome W. Bettman, MD and Ernest W. Denicke, MD

Interviewed 1986-87 by Sally Smith Hughes, PhD

OPHTHALMOLOGY ORAL HISTORY SERIES

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Dohrmann Kaspar Pischel, Dohrmann Kaspar Pischel, Jr., Kaspar M. Pischel, late 1930's.

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PREFACE

Ophthalmology Oral History Series

American ophthalmology has undergone striking changes since World War II, not only in terms of basic science, diagnosis, and therapy, but also in terms of its internal organization and relationship with medicine as a whole and with the federal and state governments. Aware of the need to document these changes, the Foundation of the American Academy of Ophthalmology sought a means to preserve the memories, experiences, and insights of individuals who had lived through them.

The result was the inauguration in 1986 of the Ophthalmology Oral History Series, an ongoing series of in-depth interviews with senior ophthalmologists and others who have made significant contributions to the specialty. Aside from providing enjoyment and inspiration, the series' intent is to preserve a fund of historical information which might otherwise be lost and to give ophthalmologists a sense of their discipline's heritage.

In January 1986, an Oral Histories Committee, consisting of William H. Spencer, MD, (chairman), Stanley M. Truhlsen, MD, Susan E. Cronenwett, Patricia I. Meagher, and David J. Noonan, was formed to facilitate collection of the oral histories. A selection subcommittee, with an anonymous membership of three senior ophthalmologists, was appointed to select individuals to be interviewed from nominations by the Foundation Board of Trustees and the Academy Board of Directors.

In selecting individuals to be interviewed, the subcommittee considers the individual's age, prominence in and contributions to ophthalmology, and ability and motivation to participate in the project. As the series expands, an effort will be made to select interviewees from different areas of the country and with different subspecialty interests. Regional subcommittees provide information concerning the local ophthalmologists to be interviewed and assist in fund raising for the oral history series.

Production of the oral histories is carried out by the Regional Oral History Office of the University of California at Berkeley. Sally Smith Hughes, PhD, a medical historian with the Regional Oral History Office, conducts the research, interviewing, and editing, and collaborates with Foundation personnel in final production of the oral history volumes. Willa K. Baum, director of the Regional Oral History Office, serves as consultant. For over thirty years the Regional Oral History Office has conducted interviews with West Coast leaders in all walks of life and is pleased to have the opportunity to expand nationally to document the history of American ophthalmology.

An oral history memoir is a recorded and transcribed series of interviews designed to preserve the recollections, knowledge, and reactions of a person who has played a significant role in or observed important events. It represents an important way to preserve information and opinions that the narrator alone is able to provide. The transcriptions are edited, reviewed by the narrator, retyped, indexed, and bound with photographs and illustrative material, and placed in appropriate research libraries.

The finished product is a record of a conversation which becomes a primary research source. It should not be regarded as having the polish and finality of a published book. Redundancies inevitably occur and are retained if they add information. An oral history is not intended to present the final, verified, and complete account of events. Rather, it reflects the narrator's view, sometimes recounted with partisanship and passion, sometimes with impartiality and objectivity, but always vivid, immediate, and irreplaceable.

The interviews, which are entirely supported by private contributions, are meant for a wide audience. Although the focus is ophthalmology, the goal is to produce documents of broad historical interest through full, referenced, multidimensional biographies.

Indexed and bound transcripts of the interviews are available to readers at the Foundation of the American Academy of Ophthalmology, the Bancroft Library, the National Library of Medicine, and other medical and manuscript libraries. The interview tapes and supplementary material relevant to each interview are on deposit at the Foundation. Oral history volumes may be ordered from the Foundation.

Sally Smith Hughes, PhD
Interviewer-Editor
Regional Oral History Office
University of California, Berkeley

William H. Spencer, MD
Chairman
Oral Histories Committee
The Foundation of the
American Academy of
Ophthalmology

March 1988

INTRODUCTION

Jerome W. Bettman, MD

The history of Dohrmann Pischel is closely associated with the history of retinal detachment. He and his father, Kaspar Pischel, spanned the remarkable era from the period when there was no effective treatment, and the condition meant loss of vision, to the present when approximately ninety-five percent are cured. But there is far more to the life of Dohrmann Pischel than his notable work in the area of retinal detachment.

During the early years of his practice, he treated and operated on all types of patients, as did most ophthalmologists during this era before subspecialization. He performed excellent cataract extraction, glaucoma surgery, muscle operations, oculoplastic work, etc. He did some basic work on tattooing of the cornea, a procedure that was not uncommon in those days before keratoplasty was well developed.

Dr. Pischel was a great and devoted teacher and maintained discipline, but with a wonderful sense of humor. Some anecdotes illustrate these virtues.

When I was a first-year resident, I was called at one A.M. to do an emergency operation on a severely traumatized eye. Soon after starting the surgery, it became apparent that a surgeon of experience was needed. Dr. Pischel was not on call, but I had him called from an engagement. He came in the black tie that he was wearing at the formal party, even though it was between one and two A.M. He didn't take over the procedure but patiently instructed this slow and inexperienced neophyte in how to do it. He came then, as he always came, because he was a dedicated teacher.

He was an indefatigable worker but always had humor. This was best illustrated to us residents with the statement that there are twenty-four hours in the day, but then, of course, there is always the night. I think he developed a bit of respect for me when we happened to meet while making rounds on our patients at approximately nine P.M. before going home for dinner.

Humor was likewise present in the way he maintained discipline. "Whenever two people have an appointment to meet, one of them has to wait, and it isn't going to be me."

He was always in control of the situation. A preoperative patient said to him, "If I don't have a good result from this operation, I am going to sue you." Dr. Pischel said, "No, you are not." "And why not?" asked the patient. "Because I am not going to operate."

During the draping procedure preparatory to a retinal detachment operation, the sterile cord connected to the electrodes was clipped to the drapes to prevent their falling and becoming contaminated. On one occasion the towel clip went through the drapes and into the skin of the patient. The patient emitted a howl of pain. Dr. Pischel said, "Just a little injection."

Aging did not diminish his sense of humor. I gathered a number of humorous anecdotes to present after a dinner in honor of his ninetieth birthday. After I sat down, he said to the large assemblage, "Jerry thinks he is a wit. Well, he is half right."

His morals and ethics were impeccable. During the 1930s and forties, rebates from spectacle prescriptions were accepted by all but a few ophthalmologists. Dr. Pischel was one of the few. He gave of his time freely and frequently, whether treating indigent patients or teaching.

Dohrmann Pischel taught his techniques to others in the area who might be his competitors. He managed to acquire one of the first three Zeiss photocoagulators in the world for Stanford Hospital in San Francisco. Soon after it arrived, he conducted free classes in the use of the instrument for all those interested, in spite of the fact that these ophthalmologists would be using the photocoagulator on patients who might otherwise come to him.

He has been devoted to his wife, Marge, during more than six decades of marriage.

In Dohrmann Pischel we have an individual who was an excellent son, husband and father, a great teacher and clinical researcher, an untiring worker who gave of himself freely to indigent patients and to inexperienced residents, as well as to practitioners anxious to learn a new technique, a gentleman of high moral and ethical standards, but one who exhibited all of these qualities with a great sense of humor.

One is reminded of Shakespeare's statement: "What a piece of work is a man! How noble in reason. How infinite in faculties."*

Isn't it a pity that there aren't more like him?

January 1988

* *Hamlet* Act II, Scene II, lines 319-320.

INTRODUCTION

Ernest W. Denicke, MD

All of us who are fortunate enough to have earned a degree in medicine from a high-ranking institution have, of course, come under the tutelage of a rather large number of teachers. But I am sure I speak for the majority of us when I say that of this group a very few individuals stand out as truly gifted and dedicated people whom we will remember all of our lives for the marvelous influence they exerted in preparing us for our careers. In my case, Dr. Dohrmann Pischel occupies a most prominent position in this select company. So it is with considerable humility that I wish to express my appreciation of this opportunity to pass on a few remembrances of our friendship.

It was when I began as assistant resident in ophthalmology at Stanford in July of 1938 that I first became acquainted with Dr. Pischel who was then assistant professor in the eye department. It soon became evident that he truly loved to teach. He would spare no effort in explaining things down to the most minute detail to us neophytes.

At that time he was running a full-time and very demanding private practice downtown. Then, several times a week, after a full day's work, he would come to the clinic and spend another hour or so discussing our problem cases and making sure we had made the necessary preparations for upcoming surgery.

It must have been a little while before I fully appreciated his efforts, as I remember one evening Bob Shaffer (my very capable assistant) and I had been waiting perhaps an hour for his arrival. I became restless, went home for dinner and had to be called back to the clinic by phone much to Dorm's (justified) annoyance. Well, happily for me I was not fired. I soon came to realize that regardless of how trying a day he had had, Dorm would gladly give hours of his time in painstaking instruction; he was a master of lucid explanation.

Dorm was one of four on the staff who worked with us in surgery, each taking on a three-month stint each year. He was a firm believer in "hands on" teaching of surgery; he gave his residents every opportunity to do the surgery themselves. He loved to demonstrate many details of technique, those "tricks of the trade" which are so important.

Dr. Pischel's lifelong interest in ophthalmology, as many of us know, was focused on the treatment of retinal detachment. He was among the first (if not the first) to bring the beginnings of effective modern surgery for this condition to the West Coast, after having studied the pioneering work of Gonin in Switzerland. The significance of this cannot be

overemphasized, since before this era, a retinal detachment almost always meant total permanent blindness in the involved eye. He introduced a number of innovations and contributed much to the literature. Thanks to the efforts and capability of Dr. Pischel and others like him, a majority of detachments can now be cured.

One of Dorm's great qualities was the empathy he felt for the victims of misfortunes such as retinal detachments. He was always acutely aware of the emotional (and financial) impact on these people. He would spare no effort in trying to achieve some sort of functional result in even the most hopeless cases — and his charges were always modest. Since detachments sometimes occur in both eyes, it is evident that his untiring persistence in treating these people averted many tragedies.

As the years went by and I entered private practice in Marin County, I saw a great deal of Dorm (and do to this day) since we live in the same small community. He and his wife, Marge, have always impressed Mrs. Denicke and me as being a truly devoted couple. Even when he was delayed at the hospital (a frequent occurrence) she would always wait dinner so they could eat together. Marge always accompanied him when he attended meetings. I particularly recall seeing the two of them waltzing together at the Pacific Coast Oto-Ophthalmological Society's banquets at its annual meetings which he went to regularly.

He is also a very versatile man, ready to respond to any emergency. One day years ago, when one went from Marin to San Francisco by ferry boat, a passenger decided to go into labor. An urgent call went out for "a doctor in the house." Dorm stepped forward, took the frantic mother-to-be to the ladies room, and delivered a healthy baby girl. I believe the infant was promptly named "Golden Bear," the name of the ferryboat! He received a glowing write-up in the local papers for that "house call."

Skiing was another of his many interests, and he participated actively in this sport until very recent times. He and Marge greatly enjoy travel; they frequently have visited Austria, his ancestral homeland. (His father, who was a pioneer eye, ear, nose and throat specialist in San Francisco, came from a town near Innsbruck.) To this day he keeps a car at a colleague's house in southern Bavaria, and he is most generous in offering the use of this vehicle to any of his friends who happen to visit that area.

Dorm Pischel is a gentleman and a scholar in every sense of the word. To know him as a friend and as a gifted and dedicated teacher is indeed a rare privilege.

January 13, 1988

INTERVIEW HISTORY

These interviews with Dohrmann Kaspar Pischel are the first in a projected series with prominent American ophthalmologists. The American Academy of Ophthalmology, sponsor of the series, selected Dr. Pischel because of his eminence in retinal detachment surgery, a field to which he has devoted much of his long and distinguished career.

Fittingly, the interviews begin with a discussion of ophthalmology in Vienna in the latter half of the nineteenth century when the city was the mecca of the ophthalmological world. It was here and in Innsbruck that Dr. Pischel's father, Kaspar, received his specialty training in ophthalmology and otorhinolaryngology. A telling incident, described in the interviews, clouded Dr. Pischel, Sr.'s future in Austrian medicine and prompted his emigration to the United States. Arriving in San Francisco in the late 1880s, he established a practice in ophthalmology which his son joined in 1926.

Dr. Pischel's account of the towering figures in ophthalmology which his father, and later he, encountered is fascinating in its own right. But it is these European connections, inherited through his father and reinforced by his own appointment from 1924 to 1926 at the First University Eye Clinic in Vienna and by subsequent trips to the Continent, that prompted Dr. Pischel's early and abiding interest in retinal detachment surgery. Stimulated by a father who even in advancing age welcomed innovation, Dr. Pischel practiced, refined, and disseminated the surgical techniques that he had learned in Europe by direct association with such major figures in early retinal detachment surgery as Jules Gonin, Karl Lindner, Henricus Weve, and Karl Safar.

In 1929 Kaspar Pischel attended the International Congress of Ophthalmology at which Gonin was finally able to convince ophthalmologists of the merit of cautery puncture for the treatment of retinal detachment, a heretofore incurable condition often leading to blindness in the affected eye. Inspired by Gonin's results, the Pischels began to use the procedure in San Francisco. In 1933 they startled West Coast ophthalmology by reporting the treatment of six cases of retinal detachment by Gonin cautery puncture. Their fifty percent cure rate was considered sensational at the time and generated a stream of patient referrals to their private practice.

Dr. Pischel's close family and professional ties with European ophthalmologists and frequent trips to the Continent kept him abreast of innovations in retinal detachment work. Observing Safar's use of minute retinal pins to drain off subretinal fluid, he developed platinum-tipped "Pischel" pins whose only rivals in the United States were

Clifford Walker's "Walker" pins. "It was strange," Dr. Pischel remarked in the interviews, "but Walker thought his type of pin was better than the Pischel pins, and Dr. Pischel for some reason thought his were superior."

Alert to innovation like his father, Dr. Pischel began in the mid-1940's to follow Gerd Meyer-Schwickerath's development of photocoagulation, a new and virtually painless technique for use in retinal detachment cases. He tells of visiting Meyer-Schwickerath in Bonn in 1957 and arranging to import three Zeiss photocoagulation machines, the first available in the United States, keeping one for use at Stanford Hospital in San Francisco and distributing the other two to ophthalmologists on the East Coast. Photocoagulation was now practicable in this country. Dr. Pischel describes the apparatus at different stages of development, the extension of the technique to other eye problems, and its eventual substitution by the laser.

Far from a mere conduit of European ideas, Dr. Pischel also refined, taught, and promoted the newest techniques in retinal detachment surgery through lectures, demonstrations, papers, and his many personal contacts in ophthalmology. Surgical colleagues and residents were welcome in the operating rooms at Stanford and Children's Hospitals in San Francisco. "I felt I'd had a chance to learn [retinal detachment procedures] and it was my duty to disseminate this knowledge."

In addition to a busy practice in general ophthalmology, Dr. Pischel volunteered on the faculty of the division of ophthalmology at Stanford Medical School. The introductions to this volume by Dr. Bettman and Dr. Denicke, former eye residents in the Stanford program, testify to Dr. Pischel's ability and dedication as a teacher. Beloved by a long line of Stanford residents, Dr. Pischel talked of his commitment to teaching and his pride in turning out "healers of the sick" rather than ophthalmologists oriented primarily towards research. Himself the prototypical healer of the sick, he appears to have had little interest in publication for the sake of publication. His modest bibliography, erratically arranged and referenced and omitting several papers, reinforces the image of a physician more concerned with the practice of medicine than with academic appurtenances.

During his chairmanship of the division of ophthalmology at Stanford from 1955 to 1960, the university made the momentous decision to uproot its medical school in San Francisco and consolidate it on the Palo Alto campus. Dr. Pischel was one of the faculty members who chose to stay in San Francisco. In the interviews, he glossed over the hardships and acrimony of the period following Stanford's move in 1959 and the efforts to restore and develop the institution which today thrives as Pacific Presbyterian Medical Center.

ORAL HISTORY PROCESS

The five interview sessions of approximately two hours each were recorded between December 10, 1986, and February 10, 1987. Dr. Pischel, a wiry ninety-one, was casually dressed on most occasions, once in hiking boots recalling his devotion to backpacking. Settling in the living room with its sweeping view of Mount Tamalpais, we had at hand the outline of suggested topics, delivered in advance of each session, and other relevant books and documents. The interviewer prepared a brief chronology of the early history of retinal detachment work, which we referred to occasionally in our discussions. Susan Cronenwett, director of the Foundation's Department of Opthalmic Heritage attended one session to take photographs and to discuss the donation of a box of Pischel retinal pins to the museum.

Dr. Pischel spoke concisely and with good recall, the dry humor and quick repartee for which he is known occasionally coloring his remarks. He had no interest in delving into issues which might reflect poorly on the individuals involved. Expressing concern about his "poor" memory, he occasionally asked for the taping to be stopped in order to collect his thoughts about people and events long past. Although a reader of this volume may justifiably question Dr. Pischel's judgment about his recall, he apparently has always been prone to forget personal names. A former resident described the occasion when Dr. Pischel, forgetting the name of a prominent visitor, sought to remedy the problem by asking the man to spell it. "S-M-I-T-H" was the reply.

The transcribed interviews, which required remarkably little editing, were delivered to Dr. Pischel with a list of questions and requests. Although several times professing that no one would be interested in reading his reminiscences, he nonetheless edited carefully, several times telephoning colleagues to verify names and dates.

The interviews stand essentially as Dr. Pischel spoke them. It is left to the reader to see beyond Dr. Pischel's modesty, to grasp his significance in the history of retinal detachment surgery and the specialty of ophthalmology on the West Coast.

Sally Smith Hughes, PhD
Interviewer-Editor
March, 1988

The Regional Oral History Office
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University of California at Berkeley

Regional Oral History Office
Room 486 The Bancroft Library

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Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Dohrmann Kaspar Pischel

Date of birth Nov 22 1895 Birthplace San Francisco

Father's full name Kaspar Melchor Pischel

Occupation Ophthalmologist Birthplace Austria

Mother's full name Minna Dohrmann Pischel

Occupation Housewife Birthplace San Francisco

Your spouse Margery Loregrove Pischel

Your children D.K. Pischel Jr. Elinore P. McAndrew
Elizabeth Heisler

Where did you grow up? San Francisco

Present community ROSS, Marin County Calif.

Education Grammar School San Francisco, Cate High school
Univ. Calif. (Berkeley) AB 1918 Stanford Medical School MD, 1923

Occupation(s) Ophthalmologist

Areas of expertise Retinal Detachments. Photocoagulation

Other interests or activities Hiking and skiing.

Organizations in which you are active Retired

Dr. Pischel being interviewed by
Dr. Hughes in his home,
Ross, California, 1987

I. FAMILY BACKGROUND AND EDUCATION
[Interview 1: December 10, 1986]

Kaspar Pischel

Hughes: *Dr. Pischel, would you tell me about your grandparents on both your mother's and your father's sides?*

Pischel: My father's parents were in Jenbach in Tyrol. That's near Innsbruck. My father, Kaspar, was born there in Jenbach. His father died when he was very young, and my father was farmed out to his godfather, who was in the Oetztal, also in Tyrol. My father grew up there in the inn that his godfather was running. My father often told me about how he had to work in the weinstube, in the bar, so to call it. When they ran out of wine he had to go down in the cellar and bring up new wine.

From there he went to Innsbruck to the gymnasium. Gymnasium is sort of a glorified high school, which they didn't have in the little village of Oetz. I never found out how he decided to go into medicine, but he did go into medicine after a very brief course in which he studied at the seminary with the possibility of becoming a priest.

Hughes: *A Catholic priest?*

Pischel: Yes. Tyrol was ninety-nine and nine-tenths percent Catholic in those days. My father said he never knew of any Protestants except the funny visitors that came to the inn in the summer.

This symbol indicates that a tape or a segment of a tape has begun or ended. For a guide to the tapes see page 121.

Medical Training in Innsbruck and Vienna

Pischel: But after a term at the seminary, the head of the seminary said my father asked too many questions. He wasn't fit to become a priest in the Catholic church. So then he switched to medicine, which also was a very dignified profession. He graduated from the medical school in Innsbruck and became an assistant at the eye clinic there.

Hughes: Why do you think he chose medicine?

Pischel: I don't know why he chose medicine except that it was also a very sought-after profession.

Hughes: There was nobody in the family that had been a physician?

Pischel: Nobody in the family. So he was under Borsiekevavich, who was a Pole in those days. That is the last century. Poland after all at that time was divided into three parts. Austria had one part, and Germany had a part, and Russia had a part of Poland. Borsiekevavich came from the Austrian part of Poland.

My father also spent almost a year during his term there in Innsbruck in Vienna under [Karl] Stellwag von Carion.

Hughes: At what point did he decide to become an ophthalmologist?

Pischel: Well, that was right after he graduated from the medical school.

Hughes: Do you know why he chose that specialty?

Pischel: I never asked him why he chose it. I'm sorry, but I never did, and so we will never know why he happened to choose that, and why I'm here.

Hughes: Was Borsiekevavich known for anything in particular?

Pischel: No, he was not an outstanding ophthalmologist. Innsbruck after all was a small university compared to the big university in Vienna. I think it was even smaller than the university in Graz.

Hughes: Many of the prominent names who later were at Vienna seem to have started at Innsbruck.

Pischel: That's right.

Hughes: Was it just a natural progression to go to Vienna for further training?

Pischel: Vienna was the most famous place in the world in those days as far as ophthalmology was concerned, and under the old Austrian Empire it had flourished due to the support of the emperor. So everybody would try to go there for a while to get the added prestige of having been in Vienna.

Hughes: Who were his teachers in Vienna?

Pischel: Stellwag von Carion, who was head of the eye clinic at the University of Vienna.

Hughes: Did he tell you any more about his time in Vienna?

Pischel: No, he never spoke much about his time in Vienna, but he always felt a close tie to Vienna. After he had been over here a while, Vienna became the place to which he went when he went abroad. But that was due in large part, of course, to Professor Ernst Fuchs, who was the outstanding ophthalmologist of his time. There never has been a man like Fuchs who so dominated ophthalmology as Fuchs did in his day. What Fuchs said was the law of ophthalmology. He was the first and, you might say, the founder of modern ophthalmology.

Hughes: Why was he given that title?

Pischel: Because of the many new things that he did to bring ophthalmology up into the twentieth century.

Hughes: I understand that one of his contributions was tying in basic research to clinical practice, that his predecessors had placed much more emphasis on the clinical approach, and he united the two aspects of ophthalmology.

Pischel: Yes, he brought the two together, because he was a good pathologist as far as ophthalmology was concerned, so that he brought the laboratory, so to speak, into prominence in ophthalmology.

Hughes: Did your father get to know him on that first trip to Vienna?

Pischel: I don't think so. I think that was before Fuchs was called back to Vienna [1885].

Hughes: Do you have any idea when your father would have been in Vienna?

Pischel: In the 1880s. That's as close as I can give it to you. I could look it up. I have his book somewhere amongst my papers of when he was in Vienna, being signed by the professor there.* But his real tie to Vienna was to Professor Fuchs, who as I say dominated ophthalmology in those years that my father was in practice.

Emigration to the United States

Hughes: Is the next step emigration to the United States?

Pischel: Yes. That's a long story. Do you want the whole story?

Hughes: I want the whole story if you don't mind.

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* The "Zeugnis" in Dr. Pischel's possession testifies to his father's attendance at the eye clinic at the University of Vienna from November 1886 to April 1887.

Pischel: Well, my father was assistant at the clinic in Innsbruck. In Austria and in Germany the title of assistant is of the upper rank. The first assistant is right behind the professor, whereas the title assistant here in the United States is the lowest rank. You come into a clinic as an assistant. The position of head of the eye clinic in Salzburg became vacant due to the death of the predecessor there, and it was the custom then for people who wanted that position to put their names in. They turned their names into the Ministry of Health in Vienna. My father, amongst others, turned in his name.

The Minister of Health or Welfare—I've forgotten what his exact title was—then held an examination. The top three names in the examination would then be forwarded to the prime minister in Vienna, who then would make the appointment. Fortunately for me, but unfortunately for him, the favorite of the minister was not among the top three. So he declared there was something faulty in the examination and they would have to do the examination over again. So my father took the examination over again. This time in the top three my father's name was there, and the favorite of the minister in Vienna. The favorite was appointed to the position in Salzburg. This infuriated my father, who felt there was no future in Austrian medicine for him, and he decided to emigrate.

At that time there were many visitors to the medical school in Innsbruck. Amongst them was a Dr. Sartain in general medicine who came from Philadelphia. My father gave him German lessons, and in return Dr. Sartain gave him English lessons. When my father decided to emigrate, I think it was Dr. Sartain who suggested he go to the Pacific Northwest. The Northwest had just opened up two railroads—the Chicago, Milwaukee, and St. Paul Railroads, and the Burlington and Northern had just gone through to both Seattle and Portland. Those two cities were booming and the districts around them were booming. My father, after consulting with Dr. Sartain, decided to go to Portland.

Hughes: Were there no ophthalmologists in the Pacific Northwest at that time?

Pischel: I think there probably were some, but it was an open field and it was growing rapidly. At that time there was in New York City a Professor Herman Knapp who had come from Heidelberg. He left Heidelberg, I believe, because he didn't get the promotion he thought he was entitled to. He built up a tremendous practice in New York City as he was a well-trained, and probably the best-trained ophthalmologist in the United States at the time. He founded the Knapp ophthalmological hospital. It was called the [Herman] Knapp Memorial [Eye] Hospital after he died. It was certainly the custom then that any German-speaking ophthalmologist who visited New York looked up and paid his respects to Professor Knapp.

Kaspar M. Pischel, (1862-1953)

Practice in San Francisco

Pischel: My father told me that he went to see Professor Knapp and told him he was going to Portland. Knapp said, "That's a good idea. The Northwest is booming. But I just heard that Dr. Ferrar in San Francisco is very ill. You come and see me before you leave New York."

So my father clicked his heels and said, "Jawohl, Herr Professor," and left, and went about certain businesses which have nothing to do with ophthalmology. You don't want to hear that story.

A few days later he came to say goodbye to Professor Knapp, and Professor Knapp said, "I just heard that Ferrar has died. You go to San Francisco and take over his practice."

My father said he clicked his heels and said, "Jawohl, Herr Professor," went down to the railroad, changed his reservation, and came to San Francisco. He had already sent his trunk by freight to Portland, and it took him two or three months before he got the trunk down from Portland to San Francisco by steamer. So that's how my father came to San Francisco.

Hughes: *Do you think he had any idea of what he was getting into?*

Pischel: No. Except here was an established practice. Ferrar, who was a Cuban, was one of the outstanding ophthalmologists on the Pacific Coast at that time, of which there were very few. Don't forget, this is the very late 1880s.

Hughes: Do you know exactly when it was when your father came?

Pischel: 1888 or 1889.

Hughes: Was Ferrar in any way associated with the Cooper Medical College?

Pischel: No, I don't think he was associated with the Cooper Medical College.

Hughes: He was in private practice?

Pischel: He was in private practice as far as I know. I never went into that detail.

The Barkans

Pischel: When my father came to San Francisco, Dr. Adolph Barkan, who had come over from Germany, was the outstanding head of eye, ear, nose, and throat in San Francisco. In those days everybody did eye, ear, nose, and throat, instead of doing just one or the other.

Hughes: That wasn't true in Europe?

Pischel: No. In Europe they had already separated into specialties. But in the United States people were still doing eye, ear, nose, and throat.

Hughes: Why was there that association, do you suppose?

Pischel: Well, because the nose is awful close to the eye.

Hughes: [laughs] Is that the only reason?

Pischel: Yes. It was all in the head so it seemed like a logical thing.

Hughes: You were talking about Adolph Barkan.

Pischel: Yes. He had come over from Hungary and had built up a tremendous practice. He was head of eye, ear, nose, and throat at Cooper Medical College, which later became Stanford Medical School.

Hughes: Did you know Adolph Barkan?

Pischel: Yes, I knew him. I met him in his balmier days. He was quite an autocrat when he ran the clinic, but he had retired by the time I knew him. His son, Hans Barkan, was one of my very good friends who helped me get started, so I felt quite a debt to the Barkan family.

Hughes: Are there any stories to be told about any of the Barkans?

Pischel: Well, when Adolph Barkan was head of the eye, ear, nose, and throat clinic, he had two people under him. Dr. [Albert B.] McKee, who took care of ophthalmology, and Dr. [Edward C.] Sewall, who did the ear, nose, and throat. Barkan liked to travel. He used to go to Europe for a month or two in the summer. In those days, getting to Europe of course was a two or three weeks' trip; it wasn't the way you could fly there nonstop now. So he didn't like to go to Europe for only a week or two.

This is a story I got from Hans Barkan. I don't know if it is true. But his father was in Europe, in Germany, traveling around, and Dr. Sewall, who was in charge of the ear, nose, and throat part of the clinic, was helping out in eye because McKee had left the clinic. Sewall became ill with tuberculosis and he had to go to Arizona. That was the thing you did in those days. You went to some sort of a hospital for tuberculosis in Arizona where you slept all day in the sunshine. Sewall telegraphed old Adolph Barkan in Europe that he was ill and had to leave the office.

Old man Barkan telegraphed back, "Close the office." This was before his son, who was studying at that time at Harvard Medical School, had a chance to take over his father's practice. Whether that's authentic or not, it makes a good story anyway.

Hughes: And they did close the office?

Pischel: They closed the office, yes. And Sewall took over ear, nose, and throat at what was then Cooper Medical School, and McKee came back and took over the ophthalmology department. So they had separated the specialties then at Cooper Medical College.

Hughes: That was late 1880s, maybe?

Pischel: No, this was in the 1900s already.

Hans Barkan, as I remember, came back to San Francisco having finished his studying in Vienna for ophthalmology. I think in 1914 he came back, or 1915. I know he had hardly started practice before the war broke out and he went into the army and was sent down to San Diego. So he had a difficult time getting started.

Hughes: Did he practice with his father for a time?

Pischel: No. His father had closed the office.

Hughes: They didn't start it up again?

Pischel: They didn't start it up again. When Hans came back he had to start his practice all by himself. Of course, the name Barkan still persisted in San Francisco, San Francisco being smaller then than it is now, so that name was well known. But as I say, he had hardly started before he had to join the army and go down [to San Diego]. In the meantime, his brother—

Hughes: *Otto.*

Pischel: Otto Barkan had gone to Oxford and then he was working in Munich at the eye clinic under [Carl] Hess. Hess was a very well-known man in German ophthalmology at the time. [pause] Well, we won't go into that.

Hughes: *You're free to say anything you like.*

Pischel: This is the trouble Hans got into down at Stanford.

Hughes: *I know the brothers had a falling out. Was that the basis of it?*

Pischel: Oh, no. Hans went to Stanford University, and while an undergraduate there, he and his fraternity brothers got into a scrape, and he was suspended for a term. Instead of coming up and facing his father—he knew what a scene that would be—he and his fraternity brother went down to Los Angeles, and he went to work in his fraternity brother's father's business down there. So old man Barkan thought American universities weren't very good, and that's why he sent Otto to Oxford. At least that's the story as I got it.

Hughes: *You spoke of Adolph as being an autocrat. Was that following along in the Germanic tradition of the professor?*

Pischel: Yes, that's right. The professor in Germany—I don't know how it is today perhaps, but in my day, even as recent as that—was untouchable. The only way you could possibly get him out of the clinic was accusing him and proving that he had been unfaithful— been a spy or something for a foreign country. Once you were a professor there you ran the clinic the way you wanted to run it. Nobody could touch you.

Ernst Fuchs

Pischel: It was the same in Austria. That's why Fuchs was running his clinic the way he thought it should be run. He had trouble his last years there. He was running this very famous Second [University] Eye Clinic in Vienna at the time Austria went into the First World War. Of course, the wounded were being shipped back to Vienna in great numbers. The army medical staff was pushed to find beds for all these wounded who were coming back, and they proposed taking some of the beds away from the eye clinic for the wounded. Fuchs objected to their taking the beds away from his clinic. That was his clinic and nobody was going to touch it. They did it anyway and he resigned.

Hughes: *Before his time?*

Pischel: He resigned before his time.

Hughes: *Then what did he do?*

Pischel: He stayed in private practice. He stayed in Vienna. He was still a famous man. He was lecturing in different places. He came to the United States to lecture. He lectured here in San Francisco at Stanford Medical School.

Hughes: Did you hear him lecture?

Pischel: Oh, heavens, yes! I helped run the slides for him.

Hughes: Do you recall what the subject was?

Pischel: Well, he was a great pathologist, and he was showing slides of pathology of the eye. He gave three talks. My father knew Fuchs very well and was instrumental in his coming and giving these talks.

Hughes: Didn't I read that when Fuchs came to San Francisco he actually stayed in your home?

Pischel: Yes, which was fortunate for me because then Fuchs was very kind to me when I went to Vienna. He helped me get started on my ophthalmological career.

Hughes: Was he approachable in a social setting?

Pischel: Well, after he was no longer head of a clinic and when I knew him he was a very charming gentleman and not the autocrat that he had been when he ran the clinic. My professor in Vienna at the First [University] Eye Clinic, Professor [Joseph] Meller, had been one of Fuchs' students and one of Fuchs' assistants. Meller told me of some of the autocratic ways that the clinic was run in those days.

Hughes: Could you tell me a few of those just for the record?

Pischel: Well, Fuchs brooked no contradictions. What he said was so, and it was so.

Hughes: He was right?

Pischel: Yes, he was always right.

The First and Second Viennese Eye Clinics

Hughes: How did the hierarchy go? You spoke of a first assistant. Who else would be there?

Pischel: Well, in Vienna at the two eye clinics there were four assistants, the first, second, third, and fourth assistant. The fourth, of course, was the young guy who had only been in ophthalmology ten or fifteen years, you see, whereas the first assistant had been there maybe for thirty years. So you can see that there was quite a hierarchy.

Professor Joseph Meller

Pischel: My chief, Professor Meller, at the First Eye Clinic, had been the last first assistant under Fuchs. From there he had gone down to the University of Graz, and he was called from Graz to fill the chair at the First Eye Clinic when that became vacant [1919].

Meller ran our clinic, the eye clinic, the way Fuchs had run his, just like the army. For instance—this always makes people wonder how things went on—if Meller wanted to give a message to one of us younger men, he wouldn't talk to one of us directly. He would talk to his first assistant, who was Ernst Bachstetz. He would say, "Herr Bachstetz, you tell Herr Pischl * so and so." I would be standing right near there and I would hear what was going on, but he wouldn't talk to me.

Bachstetz would look at me and nod, and say, "Yes." I clicked my heels and, "Jawohl, Herr Professor." And the conversation was over.

Hughes: *That was standard practice?*

Pischel: That was standard practice. If you were called into Meller's office, that was an outstanding day. He might call you in to find out how some special project that you were working on for him was getting on. When you were called into the professor's office that was a big thing.

Hughes: *Were you allowed to operate with him?*

Pischel: Oh, heavens, no! You didn't operate. No young squirt operated there until he had been at the clinic for three or four years, so you didn't operate with the professor. One good thing for the younger men about Professor Meller was that he loved vacations and he took long vacations in the summer. At that time the first assistant was the chief. He was much more liberal in letting younger men do simple operations, like squint operations, than Meller had been.

Hughes: *What did a young man do?*

Pischel: Well, we examined patients, and in examining patients you would learn about ophthalmology. In the morning at the clinic there would be perhaps a hundred, a hundred and twenty-five, brand new patients lined up to be seen that day. It was the custom that the professor would briefly look at all those patients. They would file past him. Standing behind the professor and the first and second assistant would be us young fellows. We would listen to what Meller had to say. Some patient would come by and he would look at the eye. He would say, "Sarcoma of the iris." Then he would give a little talk about sarcoma, and those were pearls that filtered down to us.

Hughes: *Were those comments intended for your education?*

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* See page 22 for the explanation of how Pischl came to be Pischel.

Pischel: Yes. Then after he had seen all these patients Meller disappeared into his office, and the work of examining these patients in detail went on. These patients were examined by us young fellows. We had six to ten young men working there at the clinic at the time. Most of the time I was the only American at the clinic. The rest were Austrians or Germans. We had one Hungarian, I remember. We would examine these patients as carefully as possible, and then we would present them to the assistant in charge of that day, who would be either the first or the second assistant. The assistant would look over what we had written up about the patient, and then he would look at the patient. If you had missed something the assistant would comment on that in a very loud voice. For instance, he might say, "Since when has it been a custom at this clinic—

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Pischel: — not to examine a patient as far as visual fields are concerned?" Everybody in the great big dark room where we were all examining patients would perk up to hear somebody else getting bawled out. After that, you never missed taking a visual field when you thought it might be necessary, or doing some other test. Of course, you were told in no uncertain terms that this was what was supposed to be done.

Hughes: So the assistants weren't any more approachable than the chief?

Pischel: Yes.

Hughes: How did the rest of the day go after you had seen your allotment of patients for that morning?

Pischel: Well, you had to clean up this a hundred, a hundred-and-twenty five patients. At eleven o'clock Meller would come stalking down from his office and he would hold the lecture in ophthalmology for the medical students, not for the ophthalmologists, but for the medical students. These were classical lectures. If we had time we would always go in to listen to him, but usually we were so busy winding up examination of all these patients we didn't have time.

Then at the end of the hour he would go in and the operations would begin. The patients had all been prepared beforehand, and Meller would stalk into the operating room, wash up his hands, and sit down at the operating table. The first patient would be walked in and made to lie down on the table. The drops had been instilled into his eyes already, and any injection—

Hughes: The drops being local anesthetic?

Pischel: Yes. If an injection was necessary, that had been made in the anteroom, and the patient was brought in and would lie down on the operating table, Meller on one side and the assistant for that ward on the other side. The operation would go and we young fellows would stand around and watch Meller. He was a wonderful operator, a very fast and very wonderful operator.

This startles people when we tell about it, but after the patient was operated on and the eye bandaged, the patient would be made to sit up on this table and step down from the table and be led back to his bed. In the meantime the next patient was being led in and he would lie down on the table. Meller would have washed his hands in bichloride of mercury solution and would operate the next patient who had been prepared.

Surgical Gloves

Hughes: *No gloves?*

Pischel: No gloves because if you wore gloves you lost the delicate touch you needed for the instruments. And with instruments you only touched the handle, and after it touched the eye and was used on the eye, it was just put into boiling water. You never used the same instrument twice to enter an eye.

Hughes: *So infection wasn't much of a problem?*

Pischel: Infections were very, very rare. I can't recall seeing more than one or two in the two years I was there [1924-1926].

Hughes: *Is it true that Viennese surgeons in the early days operated without gloves?* *

Pischel: Oh, heavens, yes. They operated barehanded. Professor Meller didn't wear gloves.

When we started out, we felt that you had a better feel for the instruments if you didn't have gloves. Don't forget at that time the rubber gloves were very thick and cumbersome. They weren't the thin, delicate ones we have today. If I remember, I started out operating barehanded because I do remember getting used to wearing gloves when I did detachment work. I put on gloves then so that I wouldn't get a shock from the diathermy current myself. Then I found out, by jingo, you could operate with gloves as well as without gloves, but that's the way it was done for years.

As a matter of fact, when I was in Vienna—that was '24 to '26—I heard about one of the surgical professors who operated with cotton gloves. He operated with cotton gloves because the viscera that he was pawing around in the patient's belly were so slippery that they slipped out of his hands, and if he wore cotton gloves, he could hold onto the intestines easier. One of the duties of the orderly was, every ten minutes, to tell the Herr Professor it was time to change gloves. The professor would put on a clean pair of cotton gloves. I never saw that but I heard that from his orderly.

Fever Therapy

Hughes: *Did you ever use typhoid or milk injections?*

* For better continuity, a later discussion of the use of surgical gloves and fever therapy has been added here.

Pischel: Yes, we certainly did. That was in the days when we called it "fever therapy." That was evolved somewhere in Europe, somewhere in Germany, I'm pretty sure it started. They would take 10 cc. of milk and inject it into the gluteus. The gluteus is what you sit on. The patient pretty soon would begin to run a fever, and the acute inflammation of the eye often was greatly benefited by this heroic treatment. What we really were doing was stimulating the development of corticosteroids, but we didn't know about steroids in those days.

When we tried that here in the United States, it was difficult to get the good fever reaction that the people were getting in Europe. Then we realized, in the United States almost all milk is pasteurized so it has very few germs growing in it. So what we did was to take the milk in a container and put it on a radiator and let it incubate for six or eight hours. By that time, if it hadn't turned sour, it had a good supply of germs growing in it. When we injected that 10 cc. into the gluteus maximus, the patient usually developed a good fever. The iritis, for instance, would be appreciably benefitted.

You had to warn the patient that this was not only painful where you injected it, but the reaction was disagreeable. Patients sometimes got nauseated. It was a hospital procedure, of course, but you could almost promise them that it would make a tremendous difference in their iritis, for instance, which it did.

So then somebody evolved—and I'm sorry I don't remember who should get credit for this—using the injection of intravenous typhoid vaccine, the typhoid vaccine that was given to develop a resistance to typhoid. I think the army is credited with really putting that forward, wiping out the typhoid in the army.

You made an injection intravenously. It was less painful and the reaction was more certain, too. You didn't have to incubate any milk, and you got a good reaction from that. But it was the same thing; it was fever therapy, stirring up the corticosteroids. It was a tremendous benefit when we started using those things.

Hughes: *Do you remember when you started using those techniques?*

Pischel: Oh, it was before the Second World War. I can't remember the exact dates. But the milk injection was very early; it was in the late twenties or early thirties probably.

Hughes: *Getting back to your professor in Vienna, Joseph Meller, aside from being a fine operator, was he known for anything else particularly?*

Pischel: Well, he was an outstanding teacher. He was associate editor or chief editor of one of the German journals. I've forgotten which one it was. He was, in his time, a well-known man in German ophthalmology. Not as well-known as Ernst Fuchs.

Hughes: *But nobody was.*

Pischel: Nobody was, no.

Hughes: *Was Meller known for any particular line of research?*

Pischel: No. I think Meller was just an excellent teacher and a good operator and organizer.

Hughes: *Tell me how you came to be at the First Eye Clinic.*

Pischel: Well, that being almost seventy years ago, I'm a little hazy on how I happened to go to the First Eye Clinic instead of the Second Eye Clinic. Fuchs had left the Second Eye Clinic [1915]. [Friedrich] Dimmer, his brother-in-law, had taken over and was chief of the Second Eye Clinic at that time. Professor [Karl David] Lindner, who was one of Dimmer's first assistants, knew my father, or my father knew him reasonably well, and I think Lindner felt that I would have a better chance of getting work at the First Eye Clinic than at Dimmer's clinic. The fame of the Second Eye Clinic was diminishing under Dimmer rather markedly. So I think that's how I came, on Lindner's advice, to go to the First Eye Clinic.

Trachoma

Hughes: *Were certain types of cases going to one clinic rather than the other?*

Pischel: They both were complete clinics. The Second Eye Clinic, however, took care of trachoma. We didn't have any trachoma beds on our clinic and we had to send the trachoma patients over to the Second Eye Clinic. But trachoma was a drudgery to take care of in those days. That was before the sulfa drugs cured it.

Hughes: *How was trachoma treated?*

Pischel: It was treated with instillation of some form of copper sulfate drops. Then one would treat the patient two or three times a week by applying a copper sulfate stick. This was crystal copper sulfate which you would apply to the everted lids. In trachoma great big follicles would appear in the conjunctiva. If the follicles were very numerous and bad you would express them.

Hughes: *With an instrument?*

Pischel: Yes, with an instrument. I've forgotten who it was evolved it. It was a sort of forceps with roller tips instead of pointed tips. You would squash these follicles and express their contents, which made the healing process quicker.

Hughes: *Was trachoma a fairly common disease in Austria?*

Pischel: Yes, especially coming up from Hungary. Serbia then had become Yugoslavia. But trachoma was, with the lack of personal hygiene, very easily communicable.

Hughes: *Did anybody have any idea about the etiology of trachoma in those days?*

Pischel: No. There was a Japanese man working in New York [Hideyo Noguchi]. He thought he had discovered the trachoma bacillus, and got a lot of fame because of that, but it afterwards proved to be wrong.* It's caused by a virus [chlamydia] and it's very susceptible to—

Hughes: The sulfas?

Pischel: To the sulfas, yes. The sulfas just made curing trachoma easy.

Hughes: But that didn't happen until about the Second World War, did it?

Pischel: That's right.

*Hughes: You said in the interview with Dr. Spencer and Dr. Bettman ** that you treated severe cases of trachoma by expression of the follicles.*** You mentioned that a wise surgeon always did this in a hospital rather than in his office.*

Pischel: Perhaps what I was thinking of was that postoperatively, after one of those expressions, the patient had considerable discomfort. If you were in the hospital, you could sedate the patient and so the discomfort was minimal. Also when the patient was in the hospital, he wasn't wandering around using his eye. But I think that the overwhelming majority of cases of expression of the trachoma follicles was done in the office.

Hughes: Did you see quite a bit of trachoma in the early days?

Pischel: In the early days, yes, especially if you had a Chinese practice. Somehow or other, my father and I developed a reasonable Chinese practice in San Francisco, and the Chinese unfortunately had a lot of trachoma.

Hughes: Was that due to poor sanitation?

Pischel: Yes. We can't say that now and that should be deleted.

Hughes: Were you interested or involved in the debate about the nature of the causal agent of trachoma? It went from being considered a bacterium, to being considered a virus, to being considered a rickettsia, and then, finally, it landed in the chlamydia.

Pischel: I'm much too ignorant to have taken part in any of that debate.

Hughes: [laughs] Oh, I don't know if I accept that reason. Anything more to be said about trachoma?

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* See interviews (in progress) in this series with Dr. Phillips Thygeson regarding research refuting Noguchi's claim.

** The following discussion of trachoma was incorporated from the interview recorded on January 28, 1987.

*** An interview with Dorhmann K. Pischel by Drs. Jerome W. Bettman and William H. Spencer, San Francisco, April 18, 1985.

Pischel: No, except that it's treated so well nowadays, and its prevention is so simple, that it should be a disease that will be almost exterminated when the millenium is reached.

Hughes: *Getting back to the First Eye Clinic, you mentioned that different assistants were in charge on different days. Was that on a rota system?*

Pischel: Well, the first assistant was Bachstetz. The second assistant, who happened to be Fuchs' son, Adalbert, was at the time I arrived at the clinic a temporary professor at Peking Union Medical College. That Peking Union Medical College was founded by Rockefeller—I mean by his money—and they had rotating professors. [tape interruption]

Hughes: *Dr. Pischel, would you like to say something about the decline of Vienna as a medical center?*

Pischel: Well, of course, Vienna in the heyday of the empire was the mecca for everybody in the Austro-Hungarian Empire, which consisted of Austria, Bohemia, a big part of Czechoslovakia of today, and a big part of Yugoslavia. Then there's the two provinces down there, and Hungary. So it was a tremendous empire. The imperial house in Vienna was very generous in its support of the university there, so that it just blossomed the way nothing else could.

Then when the Austrian empire was broken up after the First World War... Of course, here you had a big city of almost two million people in a country of six million people, which restricted them tremendously as far as the influx of patients was concerned, and also financially they were not able to support the growing increase in expenses of running a hospital or an eye clinic because of the many new instruments that had to be bought, and they just didn't have the financial background to stay as an outstanding leader.

It doesn't mean that the eye clinics in Vienna today are a secondary affair. Both of the clinics are very good clinics still, but they don't stand out amongst the best in the world.

Hughes: *In Vienna's heyday, how far afield were patients coming from?*

Pischel: Well, they were coming from almost around the world, you might say. We had people coming up from South Africa to the clinic. We had people from the Near East and the Far East. So if everything else failed you, you went to Vienna. As far as the eye problems were concerned, if everybody gave up on you in the United States, you always could turn to Ernst Fuchs in Vienna.

Hughes: *If you had the money.*

Pischel: If you had the money to get across.

Hughes: *How was payment for treatment taken care of once you got there?*

Pischel: Well, there was the public clinic part of each clinic, and then each professor had his private practice in his home.

Hughes: *For which you paid.*

Pischel: Yes.

Hughes: *How did the fees compare to those in the United States?*

Pischel: The fees were very modest. The fees that they charged were not a stumbling block.

Hughes: *So you didn't pay a surcharge for having an operation by Fuchs?*

Pischel: Well, you paid his usual fee, which was more than nothing, as the clinic patients paid nothing.

Hughes: *What was the attitude of Fuchs to his patients?*

Pischel: Well, Fuchs was very concerned that his patients got the best eye care. But the clinic patients were there for teaching purposes, and so they were used to demonstrate in teaching.

Hughes: *Did he have an autocratic attitude in reference to his patients?*

Pischel: Well, yes and no. I can recall an incident fairly early in my tenure at the First Eye Clinic. The man who was then third assistant was rather irascible, to put it kindly. He was of Czech descent, though he claimed to be a Viennese. [Josef] Urbanek was his name. His family had come from somewhere in what is now Czechoslovakia, somewhere in Bohemia. He was very interested in the slit lamp, which was a reasonably modern instrument at the time.

One occasion sticks in my mind as we were examining a young boy who had a rather inflamed eye. Urbanek was examining him at considerable length with this bright light that the slit lamp had, which was a little painful on the eye. The boy was whimpering, and the usual treatment for that was to box his ears, which Urbanek did, which stopped his whimpering temporarily. But then when he started again his mother pulled him away from the instrument, and Urbanek just quietly got up and walked out of the room. I sat there waiting for him to come back, and after a while I felt I had better go find out what he was going to do.

I went and found Urbanek, and I said, "What shall we do with the patient?"

He said, "Discharge him. I don't care to take care of him."

So I went back to the mother and told her, "Now you go over to the Second Eye Clinic and you do as you're told there, and don't you talk back to the assistant." And away she went.

So you can see that some of the assistants didn't take any back talk or any back actions very lightly.

Hughes: *Is there anything more you care to say about the importance of Vienna to the history of ophthalmology?*

Pischel: Well, as I said, it was the fountainhead for years, and many of the facts and forms of treatment that were evolved there are still being practiced today, but with modern changes. As I say, it no longer is the outstanding place that inaugurates new things. However, in the days of retinal detachment, [Karl] Safar was one of the leading men in Europe as far as the treatment of retinal detachments is concerned. And Lindner over at the Second Eye Clinic was also a leader in retinal detachment work.

Hughes: *I want to get into that in detail in another session.*

Early Twentieth Century American Ophthalmologists

Hughes: *Through your father perhaps, or however, did you also know some of the early famous American ophthalmologists?*

Pischel: Well, the man I recall most, of course, is [George E.] de Schweinitz in Philadelphia, who was a wonderful gentleman and one of the outstanding men in ophthalmology, not only in the United States but in the world. And [George S.] Derby and his colleagues up in Boston were great people. By my time Herman Knapp had died, and his son Arnold Knapp was also a very well known and pioneering man in New York City.

Hughes: *Did you know these men in person?*

Pischel: Well, I didn't know Arnold Knapp personally well, but due to my father, all of them were very kind to me when I went to visit their institutions.

Hughes: *There was no cause for them to come west in those days, was there?*

Pischel: Certainly not.

Hughes: *[laughs] I'm wondering if your father and his colleagues felt somewhat intimidated by the reputation of the East in medicine and ophthalmology?*

Pischel: No. I think under the leadership of old Adolph Barkan and the people who followed him, like my father, they felt San Francisco could hold its own against any place in the United States as far as ophthalmology was concerned.

Hughes: *Did people in the East respect San Francisco?*

Pischel: I think the people in the East, men like de Schweinitz and Derby and so on, undoubtedly felt that their institution was far superior, but acknowledged that San Francisco was a very good place also.

Hughes: *Could you say something more about the split of otolaryngology and ophthalmology? Do you know when that happened across the board, and then specifically in San Francisco?*

Pischel: Well, it happened, as I say, in San Francisco when old Adolph Barkan retired, which was about 1910, I think, or maybe a little later. But it was going on in all of the United States at the same time.

Hughes: Your father practiced otolaryngology for a while?

Pischel: Yes.

Hughes: He had that specific training in Austria?

Pischel: Yes, when he decided to emigrate and he heard that you had to do ear, nose, and throat, he worked in the ear, nose, and throat clinic in Innsbruck for a while. How long I don't remember.

Hughes: That was an unusual thing for an ophthalmologist to do in Europe?

Pischel: Yes.

Maternal Relatives

Hughes: Well, we jumped way ahead on your father's side. I'm wondering if we can now go back and pick up your mother's side of the family.

Pischel: Well, my mother's side of the family came from two parts of Germany. My great grandfather, Wilhelm Jacob Dohrmann, was in Schleswig-Holstein. Schleswig-Holstein in my great grandfather's time belonged to Denmark. The Prussians then came in 1840 something or other, marching all the way from Prussia to Schleswig-Holstein, and took Schleswig-Holstein away from the Danes. My great aunt, Blanca Dohrmann Paulsen, used to tell me how she remembered hearing the cannons shooting in the war. They went to sleep one night as Danish citizens, and when they woke up they were German citizens.

My great grandfather, who never was anything outstanding, was a physician. He was a doctor. He had been a doctor in the Royal Danish Cavalry Regiment. Then when he married an innkeeper's daughter he had to resign and he became a teacher in Schleswig-Holstein. How he got to Hamburg I don't know. But my grandfather, William Frederick Dohrmann, Sr., and his brother, A. Bernard C. Dohrmann, were in Hamburg in the 1850s, and at that time, after the forty-eight in Europe, a tremendous number of German people emigrated to the United States.

The forty-eight was a time of many little revolutions amongst the dozen or two states that made up the German country. It wasn't one big state; it was many little states, and some city-states, like Hamburg was a city-state, and Bremen was a city-state. But my grandfather and his brother decided they would emigrate, and they came to the Midwest where there were a lot of Germans, because that part of the country had opened up in the 1850s.

Pischel: My grandfather was there when the Civil War broke out. In his methodical way he told his younger brother, Bernard, "Now, I'm going to volunteer for the Union Army. You have to stay here and work and support our family in Hamburg." They were the main support of the family in Hamburg, that is their father and stepmother.

Hughes: What was the business in Hamburg?

Pischel: I'm afraid it was no business. He was a darned poor teacher and a worse doctor, so that they needed the support. But my grandfather in his methodical way took two or three days to get his papers and everything in order. He came home one day and greeted his younger brother, who was in the uniform of the Union Army. He had volunteered and was in the army. So my grandfather had to stay to support the family in Germany. His brother went off to war.

At that time you were not a very popular figure if you were a young man walking the streets of St. Louis with the Civil War on. You should be in the army. If you were a Southern sympathizer, of course, you were in the Confederate Army, and if you were a Union sympathizer, you were in the Union Army. It became very unpopular, so my grandfather decided to leave. He came to San Francisco. Why he picked San Francisco, aside from the fact that it had a big German population, also due to the emigration of the forty-eights, I don't know.

My grandmother, Philamina Ruher Dohrmann, was sent on a visit to San Francisco. You can see how seriously the Germans took the Civil War when she was sent to visit San Francisco during the Civil War. She came via the Isthmus of Panama. How she crossed it I don't remember. It was before the railroad, so she probably came on a mule train, and got onto a combination of sailing and steamer boat, passenger boat, to sail up from Panama to California. To escort them was a Union frigate, to protect them from any Confederate navy. There was, of course, no Confederate navy in the Pacific Ocean at that time, but they had this gunboat. The gunboat had so little to do that it rammed this passenger ship twice on the way to San Diego.

Hughes: Just for excitement?

Pischel: No, because of poor navigation. After all, they were sailing, and you couldn't navigate so easily as with a steamer. My grandmother told me when they finally arrived in San Diego, the gunboat captain said, "You're now safe."

She said, "We knew we were safe because we wouldn't have the gunboat with us any more." From San Diego she came to San Francisco where she met my grandfather. My grandfather came from Leipzig in Germany.

Hughes: Why had she been sent to San Francisco?

Pischel: I don't know, but she was sent to visit some friends.

Hughes: With the idea that she would stay there?

Pischel: She did stay there. Perhaps she was looking for a husband. She stayed and married my grandfather. So that's why I'm here. I'm very grateful to her family for having sent her.

Hughes: Was your father an only child?

Pischel: No. My father had three sisters, Anna, Sera, and Burgiel, and one brother, Nicholas.

Hughes: Do you know what became of them?

Pischel: Well, a representative of Nicholas's family is my cousin, who lives in San Francisco now, Rosemary . Her name was Rosa Maria over in Austria. That family was farmers up in Kematen, which is a little village north of Innsbruck. They not only had a farm there, but one of them was an engineer. They had some government jobs. I've forgotten exactly what they were. One of Rosemary's brothers, Karl Pischl, is still alive and we saw him last summer in Kematen. He's the last of that generation. One of his sons is working as an engineer. Another one is a government official in Innsbruck. So that branch of the Pischl family is perking along all right.

Hughes: And they retain the name Pischl rather than Pischel.

Pischel: Yes.

Hughes: Would you care to tell the story of why it came to be?

Pischel: Well, in those days when my father arrived in San Francisco, while there were many Germans here, people were not used to foreign accents. My father would introduce himself or be introduced as Dr. Pischl, and people would say, "Yes, Dr. Fisher, we're glad to know you." My father got tired to being called Dr. Fisher instead of Pischl.

I remember a family conference, and my uncles were present there, my mother's brothers. It came up, the idea to change the pronunciation from Pischl toPischel. They added the "e" for the "el," and so we are now Pischel instead of Pischl. There is a burg in Austria now, but that's not related to us.

Hughes: Spelled the way you spell it now?

Pischel: The way we spell it now.

Hughes: Tell me about growing up in the family. I believe you lived in San Francisco?

Pischel: Yes. We lived in San Francisco.

##

Hughes: You said you were born at home.

Pischel: I was born at home on Nob Hill, on the wrong side of Nob Hill down on Clay Street instead of the stylish part between California and Sacramento where Huntington and so on held forth. It was in 1898, I think, that my father built the family home on California Street between Franklin and Gough. That's where I really grew up. That's where all our family grew up. That was our family home for years.

Siblings

Hughes: *Did you have brothers and sisters?*

Pischel: Yes, I had two older sisters and a younger brother, all of whom have gone.

Hughes: *Do you care to say something brief about what they did?*

Pischel: Well, my oldest sister, Inez, married Harold Fletcher, who was a medical student at the time at Stanford Medical School. He went to my father's office and took over the ear, nose, and throat. My younger sister, Sepha, who was older than I, married a close friend of Harold Fletcher's, Al Evers, who was an architect. She raised her family in San Francisco, a family of four children. My older sister also had four children. In the family you're supposed to have four children. My wife had three children, and then an automobile accident fractured her pelvis, so we only had three children.

Hughes: *Well, she had a good excuse.*

Pischel: That was the excuse for not having a fourth child.

Hughes: *And how is the relative that lives down the hill related to you?*

Pischel: That's my nephew, Peter. That's my younger brother Harold, who's passed away, his third son.

Hughes: *Who lives in the barn, as you call it?*

Pischel: He lives in what was the barn, which was built first by my father in 1904, and we lived there the summer of 1905. We lived upstairs, and the kitchen and dining room were downstairs. That was before the cows and horses took over. Then the family home, which is down the hill there, which Dr. Henry Grausz now has, was built in 1905.

The 1906 Earthquake

Pischel: In 1906, the Easter vacation of 1906, the family was over here [Ross] for that week vacation, and that's when the earthquake occurred. So we were over here when the earthquake occurred and didn't get back to San Francisco for a year and a half. Well, we, of course, felt the earthquake. I remember waking up in our bedroom there and looking out and seeing trees shake and hearing

the rumble that accompanies an earthquake. My brother felt cheated because I didn't wake him up. He slept right through it. That day for some reason I drove into San Rafael. San Rafael was the nearest place where there were any stores. There were no stores in Ross. There was nothing at San Anselmo except the bifurcation of the railroad. I went into the drugstore in San Rafael, probably getting some medicine for my mother. I don't remember what it was. I remember there was a man buying some film from this drugstore, which was unusual in that this drugstore carried something besides drugs. But out in the country you had to be versatile. The man was saying that the city, San Francisco, was on fire. He was going over to get some pictures. So when I drove home I told my mother what I heard, and she said, "Nonsense, people always talk like that."

But shortly after that when we looked across towards the shoulder of Mt. Tamalpais we could see the smoke. My father came home early and said the city was burning, and he would go back the next day to try to rescue what he could from his office. So the next day he and a gardener we had by the name of Anton, a great big Italian, drove over. The only reason they got to the city when they got to the ferry at Sausalito was my father said he was a doctor and was needed in San Francisco, so they let him into San Francisco. They went up to the office and took everything they could out of the office.

Hughes: *Where was the office?*

Pischel: The office was in the Crocker Building at that time, down on Sutter Street.

Anton carried this hundred-pound magnet [for removing foreign bodies from the eye] down the five flights of stairs. The elevators, of course, were not running. There was no electricity in the city. My father came home telling us how bad things were, and the next day he was going to go over and rescue what he could from our home, which was up on California Street between Franklin and Gough. This time my father rode one of our horses and Anton drove the little mare hitched to the so-called express wagon, and he again got to the city because he was a doctor. He went out to the house, and I don't remember what he brought, but he probably brought back all the wrong things that my mother told him to get. When he came home he said, "Well, our house will go up tonight."

The next day the fire had died down. The westerly wind which had not been blowing started blowing, and it helped hold the fire at Van Ness, except for a short place between I think about Sutter and Jackson Streets where the fire managed to jump Van Ness Avenue. Van Ness Avenue was a wide street, as it is today. There were trees down both sides of the street. It was the stylish residence place of San Francisco. So the width of the street and the trees helped control the fire, but it did jump and burn the block between Van Ness and Franklin.

The wind came up, and also they were dynamiting houses at that time. They would dynamite the houses to flatten them so there would be nothing to have a big fire and have it jump the next street. They dynamited the houses on the east side of Franklin Street, which stopped the fire from jumping over and getting into the next block, which would engulf more houses. So our house,

which no longer stands—it's been torn down—was saved, and the houses across the street, the old Coleman residence and so on, are still from the pre-fire days.

Hughes: *Was your father needed as a physician in the earthquake?*

Pischel: No. He started going back right away after the fire was over. Of course, his office building had been burned. He set up an office very shortly in our home on California Street. I remember he took over the basement, which had a separate entrance.

Grammar and High School Education

Hughes: *Tell me what it was like to be in the family as a young person.*

Pischel: Well, I think my brother and I led a fairly normal and active boy's life. Our sisters were sent away to boarding school as soon as they were in high school. One sister went to a boarding school in Oakland, whose name I've forgotten, and the other went down to Santa Barbara to the Gamble School.

Hughes: *And you eventually went to Cate?*

Pischel: Then I went to Cate School when I finished grammar school at the Pacific Heights School. There's a school there now, but it's not the school we were in. The school I went to there was a big wooden two story affair, and was a grammar school. When I had finished grammar school there—my brother also when he finished grammar school there—we went down to Cate School, which my first year was in Mission Canyon in Santa Barbara, and after that was out in Carpenteria, where it still is.

Hughes: *Your parents didn't have much faith in public education?*

Pischel: Well, I think my mother was convinced that we would get a better education under pressure in the private school than in Lowell High or Mission High or some school like that.

Hughes: *Did you go willingly?*

Pischel: Well, I was told to go, so I went.

Hughes: *At what stage did you decide that your future career was going to be medicine?*

Pischel: It must have been about my third or fourth year in high school. Yes, in high school, because I worked one summer in the family store, Nathan-Dohrmann, which was at the corner where Magnin's now is—the Butler Building. They were in the ground floors. I worked one summer there, and that decided me I didn't want to go into business.

Hughes: *What was the family business?*

Pischel: My brother described the family business as "the pot and pan" business. It was a housewares firm. They had china and silverware. As a matter of fact, it was the only sterling silverware firm in San Francisco; Gumps at that time did not carry sterling silverware and other household things such as pots and pans, as my brother said. They branched out to become also the Dohrmann Hotel Supply Company.

My grandfather founded the firm with Mr. [Bernard] Nathan. People always thought that his name was Nathan Dohrmann, but it was Mr. Nathan and Mr. Dohrmann who formed Nathan Dohrmann Company, which became eventually Dohrmann's, or Dohrmann Commercial Company, which was the holding company. And that's where my brother put in his last days as the president of the Dohrmann Commercial Company.

Hughes: *And you decided early on that that wasn't for you?*

Pischel: I decided that was not for me. I was going to follow my father's footsteps.

Hughes: *Were you encouraged by your father to go into medicine?*

Pischel: My father had a very strong feeling about that. He said, "You shouldn't study medicine unless you're mad about it." I used to say, "The further I went, the madder I got." But he was very happy, of course, that one of his children followed him, and it was a wonderful opportunity for me to go in with my father..

Hughes: *Were you showing any particular interest in science in high school?*

Pischel: I don't think I showed any particular interest in science, as pure science is concerned.

Hughes: *Were you doing well in school?*

Pischel: I did all right. I graduated with honors, but that was easy.

Hughes: *Why do you say it was easy?*

Pischel: Because I was the only one in my class when I graduated from Cate.

Hughes: *Still, they didn't have to award honors.*

Pischel: Mr. [Curtis] Cate was a great inspiration. He really was one of the inspirations of my life. He had me really working hard for the sake of working hard.

Family Life

Hughes: *Were there any other people outside your family that you would consider formative?*

Pischel: Well, outside the family, no. My grandfather and my uncles were great examples of hard work, of course.

Hughes: Was there a lot of emphasis placed on hard work and diligence?

Pischel: Yes, there was a lot of emphasis on hard work and discipline.

Hughes: Who was responsible for the disciplining?

Pischel: Well, my father and mother. And we just did as we were told. We had no thoughts of going against their word.

Hughes: What sorts of things did you do for fun as a family?

Pischel: Well, we had this place here in Ross where we came for the summer for two or three months and any prolonged vacation. For a week or two at Easter time we would be over here. We had a horse and this little mare here. In the city before we came over here I remember riding horseback with my father. My father liked to ride horseback, that being one of the things he couldn't do in Europe. We had the usual games at school. I can't remember ever having been too bored with life.

Hughes: When you were in Ross your father didn't commute?

Pischel: Oh yes, my father commuted regularly, and that was one of the difficulties. He left on the seven ten in the morning, or if it was an easy day he would leave on the seven forty. It took approximately fifty-five minutes to get to San Francisco, the train to Sausalito and then the ferry across the bay, which took thirty-two to thirty-five minutes, depending on the tide. Then he had to get up to his office. How he managed his hospital practice—of course, he didn't have an automobile in those days—I don't know, he must have taken time off to get out to the hospital.

At that time he was taking the patients mostly to Lane Hospital. When he first came here, he was chief of eye, ear, nose, and throat at the French Hospital. I even have some pictures of him as a staff member out there. But then he shifted his allegiance from that to his private practice and to Lane Hospital. But the year after the fire, when we spent the time here in Ross, my father would leave in the dark and get home on the five fifteen or the five forty-five, which meant six ten or six forty in Ross.

Hughes: But that wasn't all year round, was it? You were only in Ross for holidays.

Pischel: We were in Ross for about sixteen months because the University Club, of which my father had been an active member, had been burned out. They took over our house on California Street. It was a double house. My grandparents lived in the lower section and we lived in the upper section. They were 1815 California and we were 1817; two separate homes, but joined together on the ground floor and on the second floor. The University Club took that over because they needed something, so my father foolishly let them have the house. He commuted that year, which was too much. As my mother said, my father didn't see the daylight over here during the winter. So the second

winter we rented a house in San Francisco out on Clay and Spruce Street. But we spent the summers in Ross because that was easy. My father could commute in the daylight.

Hughes: *And at what stage did you move back into the California house?*

Pischel: Well, we moved back into the California house—let's see, the fire was 1906—about 1908 to 1909. I've forgotten exactly which year it was. By that time downtown San Francisco was rebuilt and the University Club had built the building they have now. So they had a place to go.

Hughes: *Is that the house that you eventually lived in as an adult?*

Pischel: Yes. I grew up on California Street, and when we were married my mother had divided my grandfather's part of the house into two two-story apartments. My two sisters lived there. Then when their family got too big for that, one of my sisters moved out.

At about that time Marge [Lovegrove] and I were married [June 7, 1923], and we moved into the vacant apartment. Then my other sister moved out of town, so that apartment became vacant. Eventually we took over the whole wing. Until my daughter, Elinore, was born in 1933 we lived on California Street. We moved out of California Street into the home my wife's mother had built out on Presidio Avenue and Washington Street. My children all grew up there.

Hughes: *All this time, did you keep the connection with Ross?*

Pischel: Yes. We kept the family house. We used to come over in the summer with our children and impose on my mother and father who were living in the family house down there.

University of California, 1914-1918

Hughes: *By my calculations, you must have entered the University of California in 1914. Is that right?*

Pischel: Yes. I graduated from high school in 1914 and I entered UC Berkeley in 1914 just as the war broke out in Germany.

Hughes: *Why the University of California?*

Pischel: My mother's father had been a regent of the university.

Hughes: *And his name was Dohrmann?*

Pischel: His name was William Frederick Dohrmann, Sr. I'm named after him. As a matter of fact, Mr. Cate of Cate School was all for my going back to Harvard from where he had graduated. My mother said, "With your grandfather a regent at the University at Berkeley, you go to California."

Hughes: *What was the reputation of the university at that period?*

Pischel: It was booming. Benjamin Ide Wheeler had been president for some time and he built it up from what might have been called a cow college into a real university. It was big by the time I got there. Nothing compared to today, but our class was over a thousand people, about six hundred boys and four hundred girls.

Hughes: *Did the war have any impact on your generation?*

Pischel: Well, it did towards the end because in the end of our junior year was when the United States went to war. I went over there to Berkeley and joined my fraternity and lived there happily for the four years of my undergraduate life. I shouldn't say happily, because the last year was interrupted by the war. As I say, at the end of my junior year, April of 1917, the United States entered the war. A lot of people began leaving college then to go into officers' training corps.

Hughes: *Did you consider doing that?*

Pischel: I was promptly turned down as a physical wreck because I couldn't see well enough.

Hughes: *[laughs] And promptly went into ophthalmology.*

Pischel: I stayed on in Berkeley. I had been in the cadet corps in Berkeley in my junior year. I chose to stay on at that time. You had to be in the cadet corps for two years. Berkeley was a land grant college, had gotten certain lands, which they sold, from the United States government, in return for the fact that they had a cadet corps. We drilled twice a week, Mondays and Wednesdays from eleven to twelve. Twice each semester we had an all-day drill when we would march out into what is now north Berkeley. In that time that was, of course, open country, and one company would be the defenders, and the other companies would charge and try to take the hill. The battle of Berkeley was fought twice each semester.

Hughes: *How did you feel about being rejected for the service? Was that a blessing or a bane?*

Pischel: Well, it was a blessing and a bane. It was a blessing I could continue in college, and it was a bane that so many of my friends were out being officers. So I came back to college the fall of 1917. The college was then going into the war at full speed, but we still managed to keep enough people so we could run our fraternity house.

Hughes: *What was the fraternity?*

Pischel: Alpha Delta Phi. The university went full speed into the war in 1918. They built barracks in the lower half of the campus below where Harmon Gym was. There were four or five barracks, company A, B, C. We were C Company. When you came back for your graduate work you were supposed to be in one of the military companies. All of us who were medical students were supposed

to go into C Company, which was composed of premedical and medical students, and chemistry students, because they needed chemistry students to develop munitions and so on.

Hughes: *Are there any faculty members who stand out in your memory?*

Pischel: Well, the best known man—and he's known all over the world—was Henry Morse Stephens, who was a professor of history. He was a great guy all right. As far as I was personally concerned, one of the professors I knew best was our professor of anatomy, Herbert Evans, who was an outstanding man, who was one of the influences making me study good and hard. Joel Hildebrand, the professor of chemistry, was really also an outstanding person. He could make chemistry interesting even for a moron like myself.

Hughes: *At this stage were you determined to specialize in ophthalmology?*

Pischel: No. I had decided that I wanted to study medicine, and I felt I wanted to look at the different branches of medicine, and if I didn't find anything I liked better than eye I would go into ophthalmology. That's the way it turned out. In my medical schooling I followed as general a curriculum as possible, and in the intern service took a general intern service, and decided that ophthalmology was what I wanted to do.

Hughes: *When you were still an undergraduate, did you do any special studies, any special research?*

Pischel: No. I didn't do any special research. I was barely bright enough to not be thrown out of school.

Hughes: *Oh come, that's hard for me to believe.*

Pischel: Well, the only thing I can remember was about chemistry. I had no chemistry in high school. To be plunged into chemistry without any high school chemistry was difficult. I took some coaching in chemistry from somebody who was majoring in chemistry. Then when it came time to enroll in Chem 1A as a junior, you were supposed to have had chemistry in high school. I had to interview Joel Hildebrand about getting into chemistry without having had high school chemistry. We talked over what I had been doing and he finally said, all right, he would let me in.

I was put down way into the beginning chemistry class. We had as a teacher for this small class a man whose name I'm sorry I've forgotten because he was an inspiration to me also. He certainly taught me chemistry. He could make me understand it. He was so good that after a certain number of months this class was divided up into the super morons—and I was a super moron—and the plain morons. I was promoted out of this class.

I remember going to Joel Hildebrand and telling him I wanted to stay with this teacher because he was such a good teacher. He shook his head and said, "The first time I've ever seen anybody who didn't want a promotion." [laughs]

Hughes: *But you did go into the class with Dr. Hildebrand?*

Pischel: Well, he lectured to us. He didn't have these sections where you worked in the lab and so on. He lectured to a big class.

Hughes: He was a wonderful lecturer?

Pischel: He was an outstanding lecturer, yes. He kept everybody awake all right. Quite the contrary of our professor of psychology.

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Pischel: Well, I'm embarassed I can't remember the names. In history, in which Henry Morse Stephens was the professor and the outstanding lecturer, you were divided into sections. My section chief there became professor down in Honolulu. I'm sorry I can't remember his name, but he was really a great teacher also who could interest you into doing something in history.

Hughes: Was the premed curriculum pretty much as it is today?

Pischel: Oh, no. They have to have much more science than we did. I deliberately chose to stay an extra year. If you crammed the first two years and took all your science courses, you could go in as a junior in the academic part of the university. A few of the bright people did that. Most of them put in three years to get all their prerequisites off, and went into the medical school in their senior year. I decided to stay out the senior year and take some more cultural courses. I think that was a good excuse for being lazy. So I stayed out of the medical school and didn't go into it until I had graduated.

Hughes: And what courses did you take your senior year?

Pischel: Well, I took some history courses and English courses. I did— which helped me later—take the biochemistry class that you had to take in the medical schools, so when I went into medical school my first year was easier on that account. I also took physiology, which you would need in the medical schools. So my first year in the medical schools was easier.

Stanford Medical School, 1919-1923

Hughes: Stanford Medical School would have been 1918-1923, counting the internship year.

Pischel: But I did my first year of medicine on the [Berkeley] campus. That was after the war. I spent too much time in my first graduate year, though I don't regret it, getting my fraternity back on its feet and getting the fraternity as a living group going again. So the first year in medicine I spent a lot of time in extracurricular activities. So I didn't do very well as far as grades were concerned.

When it came to my second year in the medical school, my brother-in-law at that time, Harold Fletcher that I've mentioned earlier, had transferred from the University of California to the Stanford Medical School because of Dr.

Wilbur. Dr. Wilbur later became president of Stanford. Ray Lyman Wilbur was such an outstanding character in my brother-in-law's eyes, that he transferred from the University of California to Stanford Medical School, which had taken over Cooper Medical College by that time. My brother-in-law told me, "You better transfer to Stanford Medical School also and get a real medical education."

Hughes: *Now prior to that you had been planning to go to UC for medical school?*

Pischel: Yes. At that time you did a year and a half in Berkeley and then two and a half years in San Francisco.

Hughes: *And when you transferred to Stanford you, of course, went up to San Francisco?*

Pischel: Well, when I transferred to Stanford the Stanford curriculum was that you put in four quarters down on the campus. So my first quarter in the Stanford Medical School was down on the Stanford campus where I had to take, like all the rest of them, physiology, and bacteriology, and all the preclinical courses.

No, we had two quarters down on the Farm [Stanford University in Palo Alto] and then we transferred up to San Francisco for our clinical years.

Hughes: *Who were the outstanding people in preclinical science at Stanford in those years?*

Pischel: At the medical school?

Hughes: *No, down on the Farm.*

Pischel: Manwaring was there, I remember, and the professor of anatomy. And there was a woman professor of neuroanatomy who certainly made us work.

Hughes: *That was unusual, was it not, to have a woman?*

Pischel: Yes, it was.

Hughes: *And bacteriology? Would that have been [Edwin W.] Schultz?*

Pischel: Schultz? No, it was way before Schultz's time.

You have to do some sort of a thesis your years at Stanford, and most people preferred to do it while they were down on the Farm. I worked with a man—whose name I can't give you right now—on botulinous. There had been an epidemic of botulinous.

Hughes: *Now, is that botulism?*

Pischel: Yes, botulism. There had been an epidemic of botulism in which I think several people died and many people were hospitalized for long periods of time. The man with whom I worked was interested in trying to find out how you really could cure this bad disease, cure this bacterium, botulinum.

Hughes: *This was before Karl Meyer stepped into the picture?*

Pischel: Oh, heavens, yes. Karl Meyer was just starting out in San Francisco at that time. He was a friend of my father's, too.

Hughes: But you had no tie-in with Meyer at that point?

Pischel: No. This assistant professor worked on this thing and published a paper and was kind enough to put me in as a co-worker. I used to help wash the dishes, I think, in the laboratory. That was my thesis.

Hughes: What did you find out?

Pischel: I found out that it was difficult to know anything.

Hughes: Did you have any interest in research?

Pischel: When I look back on what we did, I'm embarassed how futile and how silly the work was that we turned out as a thesis.

Hughes: Did this take a year or so?

Pischel: Well, you worked in the course of two semesters to get this work done.

Hughes: Anybody else at Stanford in Palo Alto?

Pischel: No. I can't think of anybody else down there. I was ready to get up to San Francisco where Professor [A.W.] Hewlett in medicine already had made a great name for himself. By that time Ray Lyman Wilbur had become president of Stanford as a whole, not just the medical school, and [William] Ophüls, Dean Ophüls, was the dean of the medical school. Dean Ophüls was from Heidelberg, I believe. He carried two scars of the saber fights on his face. He was an inspiration to anybody. He was a real dynamo.

Hughes: What was his medical field?

Pischel: Pathology. He was a pathologist.

Hughes: So you as a student had some contact with him?

Pischel: Oh, heavens, yes. He taught us pathology. We had lots of contact with Dean Ophüls, aside from the fact he was a friend of my father's. We were a small class. We were a class of twenty-three. Three girls—unheard of—and twenty boys.

Hughes: Why was it so small?

Pischel: Because classes were small in those days. UC was small in those days. I can remember when Stanford blossomed out and had a class of fifty. We thought that was too big. Now the classes are a hundred or more.

Hughes: Did any of your classmates make a name for themselves later on?

Pischel: Well, one of them, Lauren Chandler, didn't do too badly. His nickname was Yank, Yank Chandler. He had been in the first war, as a matter of fact. He was a real hero. He had been in the hospital overseas, so he could boast a military record. Yank Chandler chose to be a surgeon. As I've said, anybody can be a surgeon after all. But low and behold, Yank became dean of the medical school.

Hughes: At Stanford?

Pischel: Yes. So I think that was pretty good for our class of twenty boys to turn out one dean.

Hughes: Did all three girls manage to graduate?

Pischel: Gerty Jones had some problems. She had to drop out. She finally got married. Margaret Melcher graduated and went back East. I don't remember what became of her. Who was the third girl? I may be wrong. Maybe we only had two. Gerty Jones became a gynecologist in San Francisco eventually.

Seitz was a pediatrician in the days when there weren't many pediatricians, and was a very good one.

When we were in medical school as interns—in our year you had to finish your intern year before you graduated—we would divide into groups of three, and Yank Chandler and [tape interruption] Cordes Anklee and I were a group of three. In your time as an intern you rotated through the various specialties. We chose medicine last because we thought it was the most difficult and we wanted to be as well prepared as possible.

Under medicine you went up to Napa. The state insane asylum was outside the city of Napa far enough to have its own little railroad station. You would put in a month up there as you rotated through it. Yank and I chose to go up to Napa, which always caused much merriment, because Napa meant the insane asylum in those days, and I have to emphasize I was there as an intern and not as a patient, although you might think I was a good patient there. Cordes Anklee took the whole time while we were away to do general medicine. Cordes Anklee finally practiced in Sacramento where he did very well as an orthopedic surgeon.

Hughes: You said there were three rotating specialties in your internship year.

Pischel: You had medicine, which was divided between general medicine and pediatrics; surgery; and then the specialties of eye, ear, nose, and throat, and GU [genitourinary surgery].

Hughes: So there wasn't a choice; there was just a choice of when you took them?

Pischel: Yes.

Hughes: Who was teaching eye, ear, nose, and throat?

Pischel: Ned Sewall, and he was a very dynamic soul. Ray Ashley was his first assistant, and was a good teacher also. McKee was in charge of the eye service.

II. EARLY SURGICAL CAREER

Eye, Ear, Nose, and Throat Service at Stanford and San Francisco City and County Hospitals

Pischel: When I finished my intern service my father was doing eye, ear, nose, and throat, and my brother-in-law had come in to do the ear, nose, and throat. I felt I ought to know something about ear, nose, and throat if I was going to this office. For about eight months I did ear, nose, and throat out at Stanford and also at San Francisco City and County Hospital, where we had a service.

Hughes: *Stanford Medical School had a service at County?*

Pischel: The medical school had a full service. We had a medical, surgical, pediatrics, and eye, ear, nose, and throat service out there. Bill Swett was doing the eye work out there, as I remember. I started the ear, nose, and throat out there. I was the first so-called extern out there. I got it off to a very poor start.

Hughes: *Why do you say that?*

Pischel: Well, because it didn't last very long.

Hughes: *You mean there just wasn't any after a time?*

Pischel: That's right. Well, Stanford pulled out of the County when they moved down onto the Farm.

Hughes: *That was 1959?*

Pischel: Yes.

Hughes: *The service continued up until 1959.*

Pischel: Yes, that's right.

Hughes: *You were still an intern, were you not, when you started that service?*

Pischel: No. I was a graduate M.D. I had graduated from Stanford. I was married and I put in those months there. At that time my brother-in-law, Harold Fletcher, was abroad studying in Vienna, and I thought I could help out my father if I knew something about nose and throat. All I was, I'm sure, was a drag on him, because he knew I was going to do just eye work.

Hughes: *I understand that there's not too much love lost between the specialties. How did you feel about it?*

Pischel: Well, each specialty thought that it was the most important, of course. When you became an ophthalmologist, you could easily say that anybody could do ear, nose, and throat. All you had to do was hack away at the tonsils or the adenoids. They also belittled us as knowing nothing except about a small sphere called the eyeball.

Hughes: *What were your feelings about ear, nose, and throat?*

Pischel: Well, I found it interesting but not alluring.

Hughes: *So there was never any thought of your switching loyalties?*

Pischel: No.

Private Practice with Kaspar Pischel

[Interview 2: December 23, 1986]##

Hughes: *Dr. Pischel, when you graduated from medical school in 1923 you immediately joined your father's practice and were there maybe half a year before you went to Vienna.*

Pischel: Yes, it was six, eight months, before we went to Vienna.

Hughes: *Had it been assumed all along that you would join your father's practice?*

Pischel: Well, in medical school, I always felt that unless I saw something I liked better I would join my father's practice.

Hughes: *Were you practicing any particular branch of ophthalmology?*

Pischel: When I joined the office my father had a big general practice. He was different than most older men; he was always eager to try anything new, whereas most older men are satisfied with what they've done. So when something new appeared he was very eager to try it. It was that point of view that eventually led me into retinal detachment work.

Hughes: *Were you encouraged by your father to get into retinal detachment work?*

Pischel: No, I was encouraged by my father to try everything that was in a general practice as we had in those days. In those days there weren't the subspecialties as there are now. Anybody who was practicing ophthalmology did all branches of ophthalmology.

Hughes: Were you operating in your own right, or were you assisting your father?

Pischel: Well, in the beginning I assisted my father, and then I did some of the operating also and he assisted me. We worked together very well.

Hughes: Was there anybody else in the office?

Pischel: Dr. Harold Fletcher had taken over the ear, nose, and throat part of my father's practice at that time, so that I had nothing to do with ear, nose, and throat.

Hughes: Were patients coming from a long distance, or were they mostly from San Francisco?

Pischel: Well, most of them were from San Francisco, but they also did come from long distances, depending on what you call a long distance. In those days, Salinas would be a long distance.

Hughes: What hospitals were you operating in?

Pischel: When I first started out and came home in 1926, I was on the University of California staff as a voluntary assistant out at Parnassus Avenue. The hospital, which now is called the [Herbert C.] Moffitt Hospital, was very small. It was very difficult to get a patient in there. So we took our patients to St. Joseph's Hospital, which was fairly near to UC. There we, in general, could get a bed and could get on the operating schedule without too much difficulty. So those first two years we were taking our patients to St. Joseph's.

Clinical Instructor of Ophthalmology, Stanford Medical School, 1928-1935

Pischel: Then in 1928 or 1929—I must admit, I've forgotten the exact date*—Hans Barkan became chief of ophthalmology at Stanford and he asked me to come over and join him, which I very happily did, and stayed there at Stanford [in San Francisco] for the rest of my active teaching career.

Hughes: But you also still were associated with your father's practice, were you not?

Pischel: Yes. In those days, we were what they called clinical professors or clinical associates, and that was a part-time job. I remember my salary the first year at Stanford was the magnificent sum of $25 a year. Then they dropped it to a dollar a year. After a while they said that made too cumbersome a

* Dr. Pischel became clinical instructor of ophthalmology at Stanford University Medical School in 1928.

bookkeeping; they just would have no salary. So I kept up my private practice to earn a living. What I did on the teaching was in addition to my private practice.

Hughes: *Were most ophthalmologists in San Francisco at that time associated with one or the other university?*

Pischel: No. I think certainly less than half were associated with one or the other of the two medical schools. Most of the men doing ophthalmology or eye, ear, nose, and throat were just in private practice.

Clinical Instructor of Ophthalmology, University of California, San Francisco, 1926-1928

Hughes: *In 1926, you became clinical instructor at UC. Is that true?*

Pischel: That's right.

Hughes: *Were you ever over there physically at the University of California?*

Pischel: Yes, I was over there very physically. The eye clinic ran in the mornings, and certain mornings in the week, I think, three mornings in the week, I was out there.

Hughes: *Did that involve any money from the university? Did you get a salary?*

Pischel: Heavens, no!

Hughes: *[laughs] Nobody did in those days, is that true?*

Pischel: Nobody, except maybe the chief did. And I don't think he did either.

Hughes: *Can you remember who the chief was?*

Pischel: Walter Scott Franklin had been the chief there and he semi-retired—as a matter of fact, he retired completely and then he came back and was active for a short time, and then moved permanently to Santa Barbara. That was the time Dr. Joseph McCool, who was in Portland, was asked to come down and head up the eye department, which he did, so that he was the chief. Whether he had a salary or not I don't know, because I had left there by the time he came down from Portland.

Hughes: *When did you leave UC.?*

Pischel: It was '28.

Hughes: *So that was a very short association?*

Pischel: It was very short.

Hughes: *Why did you associate with both universities?*

Pischel: I did the University of California first because it seemed to me that they had a better possibility of building up an eye department. The eye department at Stanford was not a very promising or a very active one at that time.

Hughes: *Was this before Dr. Barkan took over?*

Pischel: Yes, that was before Dr. Barkan took over.

Hughes: *And that changed things? Is that why you then became a Stanford man?*

Pischel: It was one of the things. And Dr. Barkan was an old friend and I thought it would be very nice to be working with him. It proved to be correct because he was very helpful.

Hughes: *Was it really because of this friendship that he asked you to join him at Stanford?*

Pischel: Well, you would have to ask Hans, who has passed to the beyond long ago, just why. But he knew me and he knew my father very well.

Hughes: *He may perhaps have glimpsed some promise in you.*

Pischel: Probably it was because both of us had trained in Vienna. [tape interruption]

Hughes: *Do you remember when you began to take on residents?*

Pischel: I think shortly after I was there the resident—we didn't call them residents in those days—was Frank Rodin.* I think he was the second one. He followed Bill [Wilbur] Swett. Bill Swett had been before Rodin, but Bill Swett had been there before Hans Barkan arrived, and I think Frank Rodin was there when Hans took over the division—it never was a department. It still is a division of ophthalmology. So when I came Frank Rodin was what you might call a resident.

Hughes: *So that was—?*

Pischel: About 1928 or '29.

Hughes: *When you say he wasn't a resident, do you mean that there was no particular program set up?*

Pischel: That's right. He just came and worked at the clinic to learn about ophthalmology.

Hughes: *So it was more a preceptorship, would that be the term?*

Pischel: Yes, perhaps.

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* A list, compiled by Dr. Jerome Bettman, of Stanford San Francisco ophthalmology residents is included in the appendix.

Hughes: *There was no defined time, I suppose? When it was decided he knew enough he went off on his own?*

Pischel: In those days there was no definite time that you had to serve before you were qualified as a specialist in ophthalmology.

As a matter of fact, in the early days in San Francisco one man went back to New York City and took a course in ophthalmology and ear, nose, and throat, and I think at the end of six weeks he came back as, in his opinion, a qualified specialist. So you can see that things were very informal in those days. It wasn't until shortly after I started practice that they began to formalize how long you had to work in a clinic to qualify. At first it was two years, and then it was three years.

Hughes: *Yet the board of ophthalmology had been established in 1916.*

Board Qualification, 1927

Pischel: Yes, but they didn't promulgate any definite rules at first. I took the boards in '27.

Hughes: Would you say something about that?

Pischel: Well, it was very brief. I can't recall. After all, that is a few years ago, and I can't remember all the details. One detail I can remember was, Hans Barkan was working on the board to help examine people. When he and I got together and he was supposed to be examining me, he and I spent the time reminiscing about Vienna. So, you can see, everything was very informal in those days.

Hughes: You don't recall who your other examiners were?

Pischel: No, I'm afraid my memory is too fallacious for that.

Hughes: Well, as you say, it was a long time ago.

Pischel: Sixty years ago.

Hughes: For ophthalmologists who had aspirations for an academic career, even at that time was it necessary to be board qualified?

Pischel: I think when I started out the majority of older men, not men as old as my father, but, say, half as old, had entered the specialty long before there was a board of ophthalmology. So I think most of the men didn't need a certificate at that time. The older men like de Schweinetz were on the board. They were the people that created the American Board of Ophthalmology.

Elizabeth Garvin

Hughes: *We mentioned off tape Elizabeth Garvin, and you thought that she probably came into your father's practice about 1929. Would you like to say a little about her since she was with you for so many years?*

Pischel: Well, she had graduated from the Stanford School of Nursing. I think she had specialized on two or three cases, that was all, when we asked her to come down to the office and work with us there. It was a very happy choice for us because she worked out perfectly and was a wonderful help, and stayed with us the rest of her active life.*

Hughes: *What sorts of things was she doing?*

Pischel: Well, all the things a nurse would do—putting drops in patients' eyes, helping with any minor operations that we did at the office, cleaning up instruments, and all the routine stuff that had to be done.

Private Practice on Post Street

Hughes: *You said that you worked very well with your father. When did he retire? [tape interruption]*

Pischel: My father didn't retire at any special date. He just came to the office less and less and saw patients who still wanted to see him and nobody else. So we can't give an actual cut-off date when he stopped coming to the office. But it probably was around 1960, I would think, when he finally stopped coming to the office.

Hughes: *Bayard Colyear came in 1951. Was he the first outsider, so to speak, to come into the practice?*

Pischel: No, Earle McBain associated with the office before that. He came in I think right before the second war [1942].

Hughes: *How did McBain end up in your office?*

Pischel: Well, we got to know each other when he was an intern and a resident out at Stanford. We got to know each other and we liked each other, so it was a natural choice.

Hughes: *And Dr. Colyear also was a resident?*

Pischel: That's right.

Hughes: *Was it a similar process?*

* As of 1987, Miss Garvin was still working part-time with Dr. Pischel's former partners.

Pischel: Yes, it was the same way.

Hughes: With the big exception of retinal detachment, did the office continue to do general ophthalmology?

Pischel: Oh, yes. As I say, in those days we were not super specialists. As long as I was at the office we had a general practice. But at the time when both Dr. Colyear and Dr. McBain were in the office, and later when other men came in to help me—for instance, when Dr. Harold Lemcke was in the office—why, we were doing practically every day a retinal detachment, and sometimes two a day. There were enough of us so we could keep a regular office practice going.

Hughes: So everybody was doing everything?

Pischel: Yes.

Hughes: All the other people associated with the office were also doing retinal detachment, plus.

Pischel: Yes, plus.

Hughes: A paper which you published in 1930 has the title, "Tattooing of the cornea with gold and platinum chloride." Do you remember that?*

Pischel: Yes, I remember it very well. That was one of the things my father did. As I said, he was always eager to try things. That was in the days before corneal transplants. If a person had a bad white scar on the cornea, which was a blemish, so to speak, you could cover this white scar with gold chloride, which had a brownish-black appearance, or with platinum chloride, which was very black. You could make, for instance, a black, black pupil in the middle of this white scar, and tattoo the rest of the scar with a little brown color. My father actually before that had tattooed these scars with pigments such as regular tattoo artists used in putting designs on people's arms, so that this gold and platinum chloride was a step forward and more efficient way of getting things done.

Hughes: Who had developed that technique?

Pischel: I don't remember who had developed that, but it was before my father took it up, naturally, because he heard about it or saw somebody do it, and took it up.

Hughes: Was there any aspect of ophthalmology that your father was particularly interested in?

Pischel: No. He came from the days when you were a practicing ophthalmologist and you did everything.

Hughes: So not even any secret loves?

* DK Pischel. Arch Ophthalmol 1930; 176-81.

Pischel: Well, I don't know. If he had any secret loves he never confided that to me. But he was always eager to try something new and he was very eager that he and I both worked very hard.

Hughes: *Do you think, because you were father and son, the way you worked together was any different than if you hadn't been related?*

Pischel: I don't think so.

Hughes: *Do you think he had the same expectations of you that he would have had of anybody assisting him?*

Pischel: I think so, yes. What do you mean? Did he practice any favoritism? I don't think so, no. He was perfectly willing and free to criticize or tell me I had done something wrong, or hadn't done something right.

Hughes: *Well, the next subject is retinal detachment, but before we move on, is there anything more you would like to say about this early period?*

Pischel: No. I think we've covered that all right.

III. RETINAL DETACHMENT

Early Medical and Surgical Treatments

Hughes: *Tell me how you became interested in retinal detachment.*

Pischel: Well, when I started out, retinal detachments were a bugbear; they were so hopeless. There were various things that were tried. There was one theory that the fluid under the retina was secreted, you might say, by the choroid, and pushed the retina loose. Then there was the other theory that there was a tear in the retina, and the fluid that was in front of the retina could get under it and lift it off.

Anyway, one of the things that people were trying to do was to get rid of the fluid. They would dehydrate the patients. They would be given injections of pilocarpine, for instance, so they would break out into the most awful sweat. They were given hot packs. Much of this was done in the hospital. The patients were so dehydrated they could hardly stir around, and they just lay quietly in bed with their eyes closed waiting for time to pass. As we know now and found out then, as they lay quietly—the eyes didn't move—the retina often would settle out in part, and very occasionally might even settle out completely. But that was a very rare thing. But when it settled out in part you thought you were on the right track, so you dehydrated the patient more and more until he could not move. So when anything new was developed to treat retinal detachments it was very, very welcome.

Hamburger

Pischel: There was a man named Hamburger who was in Berlin in the twenties. I can't recall the exact date. He had embraced [Theodor] Leber's theory that there were strands in the vitreous that pulled on the retina, tore a hole in the retina, and if you could cut those strands, then the retina could settle down into place. Hamburger evolved a double-edged knife like a cataract knife that you would plunge into the eye and move about trying to cut imaginary strands in the vitreous cavity.

He had an occasional cure with this thing. Probably it came about because he had put the knife in through the choroid into the interior of the eye at the place where the retina would settle down, and the retinal hole would be in contact with the choroid. From the trauma of the knife cutting through the choroid there would be some exudate there, and when the retina settled down, by the grace of the Lord, the hole might be closed and he had a cure. So even if he only had a cure once out of ten or twenty or thirty cases, that was one more than anybody else had.

My father visited him and came back and we tried that treatment on some cases, as I can recall, without any success.

Hughes: *Do you recall when that was?*

Pischel: Oh, it must have been before '28, '26 or '27, something like that.

Hughes: *What had you and your father been doing before Hamburger's technique?*

Pischel: My father used this dehydration.

Hughes: *Without any more success than anybody else?*

Pischel: Without any more success than other people had, so he was very eager to try anything new that could treat this hopeless disease.

Jules Gonin

Hughes: *Well, is the next step in the story Jules Gonin's contributions?*

Pischel: Jules Gonin was the man who showed us how to cure retinal detachments. Going back in the history of that, he started out in the eye clinic in Lausanne, which is on Lake Geneva. The people of Lausanne resented the fact that the people in Geneva could call the lake, Lake Geneva. They didn't own the lake, they said.

But anyway, he practiced there and started out on the theory that you had to close the tear in the retina. In 1925, before the German Ophthalmological Society, he presented, I think it was, twenty-five cured cases. Nobody paid much attention to him at that time because he was a French-speaking Swiss ophthalmologist, and I think most of the Germans just thought -- Here's another Frenchman telling tall tales.

Then in 1927, again at the German Ophthalmological, he presented fifty cured cases. That's when some people began to believe that he really did know something. One of the men who believed him was Professor Karl Lindner from Vienna. Another one was an assistant, Karl Safar. They both, when they went back to Vienna, began to think that maybe Gonin was right. Lindner started to cure retinal detachment the same way Gonin did.

Hughes: *Would you tell me how Gonin did it?*

Pischel: Well, he would very carefully examine the eye, and it was amazing how much he saw with the weak light of the ophthalmoscopes that were used in those days. He used a reflecting ophthalmoscope which had a small mirror, perhaps two centimeters across, and he used a gas incandescent burner as the source of illumination. With this indirect ophthalmoscopy, monocular ophthalmoscopy, he examined the fundus very thoroughly. I know how thoroughly he did it because I visited him while he was still using this method of examining. His office, like that of most European ophthalmologists, was in his home. One of the living rooms had been made into an office.

He was very gracious when I visited him in 1931. I sat in one corner of this large room while he was examining the patient, and I'm sure that a couple of times I dozed off while he was working at this job of examining the fundus with this illumination. I remember distinctly I, at that time, had one of the early Bausch and Lomb ophthalmoscopes with what we would consider today a comparatively weak light. But it was direct upright ophthalmoscopy instead of the indirect, in which the pictures were reversed, of course.

He said to me, "My patients all say that the American ophthalmoscope has too bright a light." And I considered the light I had as being very much on the weak side of what we ought to have. But that shows what a good man and what a real genius Gonin was that he could do all this work with his indirect reflecting ophthalmoscope.

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Hughes: How did Dr. Gonin come to the idea that it was the tear that had to be repaired?

Pischel: Well, Leber way back in the seventies or eighties, I think, first promulgated the theory that the tear in the retina came first and detachment came second. But I can assure you, I did not have the nerve to question Gonin as to how did he happen to think of this procedure. I stood in such awe of this genius that I wouldn't question anything. That's the way we were in those days.

Hughes: When he was doing such careful work with the ophthalmoscope, how was he recording, or was he recording, his observations?

Pischel: Yes, he made a sketch of what he saw in the fundus, and then he would translate that into hours of the clock. The tear was at one o'clock or two o'clock or eleven o'clock, and it was one or two or three disc diameters from the ora serrata. Calculating the ora serrata at about eight millimeters from the limbus, he would localize it.

At that time when he operated, he and his assistant—and his assistant just happened to be the son of his teacher [Marc Dufour]— Gonin was always very careful to introduce his assistant as "the son of my teacher." When they were operating together, they would spend twenty or thirty minutes examining the eye and deciding just where that tear in the retina would be. That was the long part of the operation. These operations were all done under local anesthetic, reinforced by psychic anesthesia. If the patient became restless, he was told to be quiet and, of course, he did. He was quiet.

They would finally decide here was the localization. They used a thread which they passed across the cornea to give them the proper meridian, and then they would measure back the millimeters from the limbus. Then they put a little spot of India ink on the sclera. Then the rest of the operation took a matter of seconds. The nurse had the red hot cautery ready. Gonin took that in his hand and plunged it through the sclera. You could see the steam coming out as the fluid hit the red hot cautery and cooled it down. The retina would be swept towards this perforation and Gonin would sew up the conjunctiva and the operation was over.

The patient was put in bed with the hole down, so he had to lie on his side or on his face or on his back, depending where the tear or the hole in the retina was. So the exact localization took twenty or twenty-five minutes, and the rest of the operation took two minutes. He was successful because he was so meticulous in trying to find where the tear was.

Hughes: *He wasn't concerned about the subretinal fluid?*

Pischel: Well, he knew you had to drain the subretinal fluid to let the retina come back against the choroid, where the exudate caused by this cautery would then help seal the scar as the exudate was turned into scar tissue.

Hughes: *So that was the purpose of the cautery?*

Pischel: Yes. It had two purposes: to drain the subretinal fluid and to stimulate an exudative choroiditis that could seal the tear.

Hughes: *Other than the fact that he was French-Swiss, do you think that there was anything that prevented his technique from being taken up? There was quite a long delay. I read that he did his first operation with the cautery in 1919.**

Pischel: It could be, because it took him a long time to get the first twenty-five cures. He had to refine his techniques and develop his accuracy in localization. So as I say, by '25 he could only report twenty-five cases.

The big breakthrough came, of course, in 1929, at the International Congress of Ophthalmology in Amsterdam. Gonin presented a hundred cured cases. That started the world of ophthalmology into believing that he really had something. From then on he was swamped with visitors to his clinic, and he was always very gracious, so I'm sure that he never turned any visitors away because there were too many of them at one time. But by the time I got there in '31, the big wave of visitors had passed, and there was only, as I remember, one other man there, an Egyptian who wasn't very eager to work very hard, so I had plenty of time to be able to see what Gonin was doing.

Hughes: *You were seeing and not actually doing?*

* S Duke-Elder and JH Dobree, eds. Diseases of the Retina. System of Ophthalmology, vol. 10. London: Henry Kimpton, 1967; 818n.

Pischel: I certainly did not do it, no. No, I was a visitor and saw what he was doing. But as I say, he was very gracious and explained everything. As there were only the three of us—he, his assistant, and I as an observer, and then the nurse—I could see very clearly what he was doing. It was easy to observe what he was doing.

Hughes: Had you made that trip in 1931 specifically to learn Gonin's technique?

Karl David Lindner
Vienna, 1932

Karl David Lindner

Pischel: Yes. I wanted to visit Gonin as the father of curing retinal detachments and then I was going to go on to Vienna where Lindner had told my father I should come and he would show me how to do it, and maybe let me do an operation.

Hughes: Lindner by that time had modified Gonin's technique?

Pischel: Oh, yes, Lindner was a very brilliant man, and he modified things. He started out using a red hot cautery. It was a little different. It was a galvanocautery. Today people don't know what the words mean. Gonin used a Paquelin cautery. A Paquelin cautery had a hollow tip, and you pumped benzene gas into this tip. You heated up the tip in an alcohol flame until it was red hot. From then on the gases inside this hollow tube kept the tip red hot.

I asked Professor Gonin where he got this cautery because I wanted to get a similar one. He said, "Oh, in the toy shop you can get that." It was used by children to make little designs in wood. Some of you may have seen these burned in designs in wood. It was quite the thing for a while. So that's where I got my first cautery tip for the Gonin procedure.

Lindner had changed it to the galvanocautery, which is a wire through which an electric current passes, and the wire gets red hot from the electric current passing through it, from the resistance. That was a much simpler thing, so I never got to use Gonin's Paquelin cautery. Paquelin named after a Frenchman, [Claude-André] Paquelin.

Then Lindner evolved other things. He evolved potassium hydroxide treatment of the choroid. We knew by then that you had to stir up exudate in the choroid at the point where the retinal tear, as we called it in those days, and the retinal break, as it is called today, where the lesion in the retina would settle down. You had to stir up the exudative choroiditis there so the exudate would help obliterate the hole, and as the exudate was absorbed and formed into scar tissue, the hole would be obliterated.

That was one of the difficulties with Gonin's operation. If there was a very big tear, sometimes only part of the hole was sealed because the exudate had not spread far enough, and it was necessary for him to go in a second time right near his original perforation to get the cure. And there were other things that developed as a late result of his operation. But he was curing approximately sixty to seventy percent of the cases, which was sixty or seventy percent more than anybody else in the world.

Hughes: *Lindner or Gonin?*

Pischel: Gonin. By the time Lindner came along, the cures were up in the seventy percents.

Hughes: *I understood, too, that one of the differences between Gonin's technique and Lindner's was that Lindner actually used a barrage of trephine holes.*

Pischel: Yes. Lindner evolved the idea of putting a barrage around the hole so that you had a better chance of getting the hole caught inside the barrage. Some of his cases—and when I followed his technique in some of my cases—the hole would still be open, but the barrage had successfully sealed the area around the hole so that the fluid could not dissect back and lift off the rest of the retina.

A patient of mine, who died just a year ago, had a hole that was open for something like forty years. But she stayed cured because the barrage held. So that was a big step forward and made things simpler when Lindner evolved the Abrieglung operation. Walling off was the best translation, walling off the area of the diseased retina from the good retina.

Hughes: *I also read of a procedure that Lindner used that was called the undermining operation.*

Pischel: That all was an endeavor to stir up this continuous band of choroiditis. What he first did was he made a trephine opening through the sclera and he touched the choroid that was then exposed with potassium hydroxide. Then he neutralized that with acetic acid. That would stir up exudate there. Then he evolved the barrage technique, and that entailed making maybe ten or twelve trephine openings through the sclera. Now, making one opening through the

sclera with a trephine is difficult. Making ten or twelve is very difficult, but that's what he first did, thereby creating a barrage to wall off the diseased retina from the normal, healthy retina.

Then his undermining operation was a simplification. He made half or a third as many trephine openings, and then he undermined the choroid from one trephine opening to the next, and he injected a very weak solution of potassium hydroxide, which then stirred up a remarkable amount of exudate, and thereby with this undermining operation he undermined the choroid. He put a complete barrage around the affected area, or leading up and to the ora serrata. The ora serrata would complete the barrage.

Hughes: *You speak of it being very difficult to place the trephine holes correctly. Do you mean so that you don't puncture the retina?*

Pischel: No, the problem is you don't want to puncture the choroid. You want to leave the choroid intact so you could treat it.

Hughes: *How was he determining where he was in the eye?*

Pischel: His localization was on the lines that Gonin had laid down, that you localized the hole by hours of the clock and then millimeters back from the limbus you had to go, and that was where the hole would be, and then he put his barrage around that area.

Hughes: *He probably had a better ophthalmoscope than Gonin had originally?*

Pischel: He was using a more powerful ophthalmoscope with brighter light. But unless my memory fails me, Lindner was still using the indirect reflecting ophthalmoscope.

Hughes: *In the early thirties, that would be?*

Pischel: Yes.

Hughes: *And what about anesthetics?*

Pischel: Well, there were local anesthetics, and in Vienna reinforced with a large amount of psychic anesthesia. If the patient murmured, you said, "Ruhe!" And the patient said, "Jawohl, Herr Professor," and he kept quiet.

Karl Safar followed Lindner, and then in Vienna at that time Safar had taken up the question of retinal detachment. Safar had been at the First Eye Clinic as an assistant when I had been there originally from '24 to '26, so I knew him. The operation that he evolved was very time-consuming, so the young men who were active at the clinic when I visited there again in 1931 were not eager to help him because it took too much time. So I had the great opportunity, as I knew Karl Safar, of helping him with his second operation in which he used the micropins. By that time it must have been 1932, because we were there after New Year's. So I followed Safar's work there for the weeks I spent in Vienna.

Safar had envisioned, instead of draining through the hole with the cautery, he was going to make a series of punctures with the diathermy needle. Now he said, "How can you drive a set of nails into a keg of beer without losing any beer? You have the nail hole and you don't lose the beer until you start pulling out the nail." With that philosophy in mind he developed these pins which we would put in a series around the tear, and we didn't lose any fluid so the eye had its tone, and the retina hadn't settled down to get into trouble. And then when you had made all your punctures, you pulled out your pins and got your drainage.*

Henricus Jacobus Maria Weve

Pischel: Then from there I went to Holland, to Weve, who was at Utrecht, who also had taken up curing retinal detachments. He was one of the early disciples of Gonin. He was using a different method. What he contributed was instead of using the small two centimeter mirror in your indirect ophthalmoscope, he had one that was perhaps five or seven centimeters across and reflected a tremendous amount of light. And he used a very strong bulb as the source of light. What he contributed was that you needed a lot of light to see in the fundus. Weve at that time was one of the first men who was using diathermy to stir up the exudate in the choroid.

Diathermy

Pischel: Safar had gotten the idea of diathermy from Weve, and Safar used diathermy when he used his micropins and put in the barrage of micropins around the tear.

Hughes: *What was the advantage of diathermy over galvanocautery?*

Pischel: Oh, it was much more refined. You could make the dosage much smaller and more precise, so you didn't have to use such a crude thing as a glowing, red hot electrode.

Hughes: *Where did Safar and Weve get their diathermy equipment?*

Pischel: I can't remember where they got their diathermy equipment. Diathermy was being used by the dermatologists at that time for cutting off warts and things like that, so it was nothing absolutely new.

There was another man, [Sven] Larsson, up in Sweden, who was also working with diathermy. He was one of those who stimulated the use of diathermy. Larsson never was very much interested in retinal detachment work. I visited him and saw him operate, and he had a good number of cures. But that wasn't his primary interest, so he passed that on to the younger men at his clinic. But he also deserves credit for popularizing diathermy.

Hughes: *Did the younger men at his clinic continue with the diathermy?*

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* The foregoing paragraph came from an interview with Dr. Pischel by Drs. Jerome K. Bettman and William H. Spencer, San Francisco, April 18, 1985. (Unpublished transcript, p.18)

Pischel: Yes.

Hughes: You mentioned Safar's micropins. What did they look like and how were they used?

Pischel: Well, they are hard to describe. There was a small shaft, and by small I really mean small. The whole thing was maybe two or three millimeters long at most. One end of the shaft was pointed. The other was rounded. You grasped that rounded end with a special forceps that would hold it firmly, and there was a disc of some insulating material that separated the pointed end from the rounded end of the shaft. You would grasp this pin with these special forceps and touch it to the sclera. When you touched it you turned on your diathermy current, and the pin just perforated the sclera, cutting its way in. In a fraction of a second, zzzttt, it would go through. Then you'd take another pin.

Weve was using a series of perforations that he quickly did without any pin, just with a diathermy electrode. He put a quick circle around the area where the tear should be. Before the eye got too soft, he had his operation completed. He was a very skillful and quick operator, and also a very gracious gentleman.

Hughes: Would Lindner take longer with his procedure?

Pischel: Oh, yes, Lindner's undermining operation was a long procedure.

Hughes: And how did he handle the fact that the eye became soft?

Pischel: Well, he was very careful not to perforate the choroid until he was ready for drainage. He finished all his trephine openings, and all his undermining, and then he would perforate one or two of the trephine openings to let the subretinal fluid escape. So that's why you had to be careful not to perforate. As a matter of fact, I think it was [Hermengildo] Arruga in Barcelona, who was following not only Gonin's work, but Lindner's work, who evolved a little plug you could screw into this trephine opening if you perforated the choroid by mistake. Arruga was one of the great names in the early days of retinal detachment work.

Hughes: What was the plug made of?

Pischel: Probably platinum or iridium, something valuable so it wouldn't corrode. You just left it in temporarily, and then when you were ready for drainage you took it out.

Hughes: In connection with Safar I read of the term stenopeic spectacles. Could you tell me about them?

Pischel: Stenopeic glasses are spectacles that are all blacked out except for a tiny little hole right in the middle. The idea was that if the patient wore these spectacles he would look straight ahead through this little hole and wouldn't rotate his eye. I think it was Lindner who evolved the stenopeic glasses, not Safar. We all followed that in our postoperative treatment. We kept our patients in bed

for ten days, two weeks, three weeks, and when you let them up they had to wear stenopeic glasses for a number of weeks until we were sure the scar had healed tightly and it was safe for the eye to resume its normal rotations.

That leads into how does the fluid get under the retina. It's the rolling round of the eye in its socket in normal life as you're looking around; the fluid could get under the lips of the retinal break, as it is called, or the retinal tear as we called it, and the rotation of the eye would let the fluid act like a wedge and pry the retina loose from its contact with the choroid, or the pigment epithelium if we have to get very technical.

Lindner's Eyeball Shortening Operation

Hughes: *Should we go on now to other methods for treating retinal detachment? I'm thinking of methods like the eyeball shortening procedure.*

Pischel: Well, Lindner already back in those early days had evolved the eyeball shortening operation, as he called it, with the idea that the retina had shrunk and the only way you could get it to fit the eye was by making the eyeball smaller. If you visualize a felt hat, a man's hat or a woman's hat, with a silk lining, if the silk lining doesn't touch the felt of the hat everywhere, you can do two things. You could put in a slice of silk to make the lining bigger, which in the eye was not practical, as the retina would not respond to that; or you could make the felt smaller, make the hat smaller—and then the shrunken silk lining would fit the hat. With that in mind, by making the eyeball smaller, the retina could fit back onto the choroid. That was Lindner's big contribution, the eyeball shortening operation. I should say it was one of the many big contributions he made.

Hughes: *Was that a very long and tedious procedure?*

Pischel: Yes, it was a very tedious and a very long procedure.

Hughes: *In his clinic were you also observing, or were you allowed to assist?*

Pischel: Well, Lindner was kind enough to let me assist him, and the younger men were very glad to have somebody else stand around who would assist him.

Hughes: *Because it was a long procedure?*

Pischel: That's right.

Hughes: *In 1939 you published a paper on one case of eyeball shortening.* Do you remember that paper?*

Pischel: I remember the paper, but I don't remember the patient.

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* D Pischel, M Miller. Retinal detachment cured by an eyeball- shortening operation. Report of a case. Arch Ophthalmol 1939; 22:974-9.

Hughes: *Well, it was a patient who was already blind in one eye. You tried diathermy several times without success, and then went on to the eyeball shortening procedure, and her vision was essentially restored. Was that the only time you did the eyeball shortening procedure?*

Pischel: Oh, heavens, no. I did a number of eyeball shortening operations. It was a very long, drawn-out procedure. You could ask some of my former residents how long and drawn-out the procedure was. It was a very long operation, and very meticulous. You had to be very careful you didn't perforate too soon. By a long procedure I mean it might have taken two hours to do one of those cases. Luckily, we were in the United States where we didn't have to use psychic anesthesia. We could use real anesthesia.

In those days our anesthetist at Stanford Dr. Wrethweln was really very gracious, and she would sit there holding up the patient's chin so that the airway would stay clear. For two whole hours or more she would sit there. We did those things under avertin anesthesia at first. You gave the patients an enema of this chemical avertin, and they went to sleep, and they slept soundly for hours.

Hughes: *Why wasn't general anesthesia being used in Europe for operations such as that?*

Pischel: Because they had not developed the refinements of general anesthesia that we had here in the United States. We were way ahead in developing general anesthesia, and the various refinements that made general anesthesia easier on the patient and better for the surgeon, too.

Hughes: *So Lindner would do a two-hour operation under local anesthetic?*

Pischel: Yes. Sometimes they would have to reinject the novocaine when it started to wear off.

Hughes: *Ow.*

Pischel: Yes, a rather grim picture.

Dr. Pischel's Visit to European Clinics, 1939

Pischel: In 1939 I visited various clinics again. Professor J. Boeck, Josef Boeck, who had started out at the First Eye Clinic when I had started out, had been called back to Vienna and was active there. [tape interruption]

After Vienna I eventually went up to Berlin where I saw Dr. [Alois] Meesmann. He also was interested in a way of curing detachments, but it was only a modification of what had been done. But he was a very skillful operator.

Then we left Berlin and went to Utrecht, where I wanted to visit Weve again. I remember that very well because the trains held up at the Dutch border. The Dutch army was mobilizing the border guard and our train was held up. Eventually we reached Utrecht about four hours late. Things were somewhat in a turmoil. I remember when I got to Weve's clinic, everybody was clustered around a radio loudspeaker because the prime minister was making a speech

saying they were mobilizing the border guards just as a precaution against Nazi Germany, and it was not a case of war being declared. That was a good introduction to continental life. Weve had three sons, all of whom would be in the army, I remember he told me. So my visit to Weve was rather spoiled by all this turmoil of the mobilization. [tape interruption]

With all this turmoil of the border guard being mobilized, you could see that things were not normal. I had just heard from home that my father was ill and needed an operation and didn't want to have the operation until I got home. So I went into Amsterdam to see what steamer we could get going home. Those were the days you traveled by steamer. The earliest steamer was the Queen Mary out of England, and we got the last cabin on the upper deck of the Queen Mary.

We left Holland a day earlier than I would have planned otherwise so we could get to England. The boat was crowded with Jewish refugees from Nazi Germany going to England, so crowded that the boat train in England didn't wait for everybody. It went off and we had to take a regular train. But we finally got to the Queen Mary and came home on the Queen Mary. But that was the end of that trip, and we had accomplished it just in time because, as you know, war broke out that fall.

Eyeball Shortening and Buckling Operations

Hughes: *Dr. Pischel, you talked about eyeball shortening, but there were also the buckling procedures. [tape interruption]*

According to my notes it was Leopold Mueller who in 1903 introduced the procedure for shortening the sclera to reduce the volume of the eye.

Pischel: Yes. He was doing that to cure myopia. We know that a myopic eye is longer, is bigger around, than the normal eye. What he was doing was taking out a crescentic piece of sclera to make the dimensions of the eye smaller so there would be less myopia.

Hughes: *Do you know if the operation was—*

Pischel: Popularized? No, it was not popularized. It was looked upon with horror. It was a tedious and dangerous operation. If you were nearsighted, glasses would cure that for you, and you shouldn't be so vain that you didn't want to wear thick lenses.

Hughes: *And [Laszlo de] Blaskovics' role in this? I have in my notes that in 1912 he popularized a lamellar resection.*

Pischel: Well, that must have been a variation of Mueller's operation, because that was before operations for retinal detachments were being done, and before Lindner's eyeball shortening operation.

Blaskovics was a very brilliant plastic surgeon. He did many plastic operations around the eye that hadn't been done before, which he refined and popularized. He was a very active man in Budapest, and also a very gracious gentleman.

Hughes: *You visited him?*

Pischel: I visited him very briefly.

Hughes: *Do you think Lindner, when he developed his eyeball shortening technique, was in any way influenced by this previous work?*

Pischel: I think undoubtedly he was. I'm pretty sure that either he or somebody at that time when Lindner started to do the eyeball shortening for curing retinal detachments mentioned that this was just a repetition of Mueller's work. So I'm sure that Lindner knew about Mueller's work.

Hughes: *And then much later we come to [Cyril K.] Shapland.*

Pischel: An Englishman, a very pleasant gentleman who took up Lindner's eyeball shortening operation, but realized that if you left a lamella of sclera behind it would do no harm, and it made the operation much safer and much simpler. One could do it quickly and achieve the same result. Actually, of course, what he did was to get a small buckle on the inside when he folded in this thin lamella of sclera that he had left behind, so he was doing an inward buckling operation, which also helped to bring the retina and choroid into apposition.

Hughes: *And then Dellaporta and Paufique?*

Pischel: Angelos Dellaporta, who is now down in Palo Alto. [Louis] Paufique was in Lyons, France, I think. He also took up retinal detachment work and followed Lindner's theory of doing eyeball shortening. But I must confess I'm not very knowledgeable of Paufique's work.

Hughes *Were these procedures usually a last ditch effort after you had tried some other means?*

Pischel: Yes, you wouldn't try scleral resection right off the reel because it was such a momentous operation, shall we call it. Usually you tried some of the simpler things first to see if you could get a cure, and then when you were convinced that that was the only thing that would do it, why then you would do that. Shapland deserves the credit for popularizing the lamellar scleral resection.

Hughes: *Is that still performed?*

Pischel: I think on occasion one would do that.

Leopold Mueller and Laszlo de Blaskovics

[Interview 3: January 14, 1987]##

Hughes: *Dr. Pischel, we talked last time about eyeball shortening and buckling operations, but we didn't really do a comprehensive job. I thought today we would start at the beginning again, which I believe is with Leopold Mueller's eyeball shortening operation.*

Pischel: I've forgotten the exact year [1903] when Mueller advocated doing eyeball shortening for the correction of myopia. He wasn't trying to cure retinal detachments, but he was trying to prevent them because the eyeball was stretching. He dissected out a crescent of sclera. Blaskovics down in Budapest—well, eventually he was in Budapest; originally he was out in one of the other cities—well, anyway, Blaskovics also took that up. Blaskovics was an exceptionally skillful surgeon.

Karl David Lindner (continued)

Pischel: Then Lindner, in whatever year you've got down [1934],* took it up and revived the through-and-through resection that Leopold Mueller had done for curing myopia. When he did his through-and-through resection, it was a very laborious and long, drawn-out procedure. The operation often took two hours. He would outline the amount of sclera he wanted to resect with partially penetrating incisions, and then at one end of this ellipse he would go through to the choroid. Previous to that he had put in the sutures that would eventually close this opening in the sclera, so when he started to dissect out the crescent of sclera, the sutures had to be pulled aside so you didn't cut them by accident, which happened more than once to everybody. He would touch the exposed choroid with a potassium hydroxide stick, and then he would pull up the suture. When the eyeball became so firm that you couldn't pull up the sutures, he perforated the choroid, cauterizing it with a sharp needle, and let the subretinal fluid out. Then the eye would be soft enough so you could pull up many more of the sutures. He might have to perforate the choroid two or three times until the whole crescent was closed. This, of course, not only shortened the eyeball—he called it the eyeball shortening operation, the Verkurzung Operation—but he also produced a buckle of choroid inside the eye which would help bring the choroid and retina into contact.

Cyril K. Shapland

Pischel: Shapland was an early follower of that technique and devised the idea of leaving a very thin layer of sclera behind, which avoided the danger of spontaneous rupture of the choroid. So Shapland deserves a lot of credit for starting us all on the way of doing partially penetrating scleral resections. I think Shapland treated the bed of the excised sclera with diathermy, but it may have been something else. I don't recall that accurately. When we did it we used diathermy, putting a barrage of diathermy along the bed of this

* A list of dates and developments in twentieth century retinal detachment work was sent to Dr. Pischel in advance of the interview.

thinned-out sclera, and then would perforate it with some diathermy needles to get drainage so that the eyeball was softened and one could pull up the sutures. This had the advantage not only of shortening the eyeball, but of producing an appreciable buckle on the inside of the eye.

Hughes: *The thinned-out sclera was directly under the break?*

Pischel: You tried to put it a little posterior to the break, and it would push the choroid up so that the retina and choroid, with the retinal break anterior to your barrage, would settle down and get sealed into place.

Hughes: *With such a complicated operation, was there a problem with infection?*

Pischel: It was amazing how little trouble we had with infections. The good Lord perhaps was good to us. I think the sclera was a poor place for any germs to grow. It was not a good incubation place, so as we kept out of the interior of the eye except for some perforations with diathermy, it was really in that respect a trouble-free operation. [tape interruption]

Leopold Jess

Pischel: In '39 I visited Jess on my swing through Europe. He at that time was implanting a buckle of gauze under Tenon's capsule and suturing it to the sclera in such a way that it formed a buckle on the inside. He sutured it with the sutures over the gauze sponge so it pushed the sponge in towards the center of the eye, and he got a very appreciable scleral buckle. Then two or three weeks later with a very minor operation he would go in and cut the sutures and pull the gauze sponge out.

Hughes: *Did you ever try that operation?*

Pischel: No, I never did, because by the time I was doing that we were using something different.

Lindner's and Weve's Reefing Stitch

Hughes: *What about Lindner, in 1949, and Weve at about the same time, and their use of the reefing stitch in the sclera?*

Pischel: If we skip now to the postwar years, Lindner was very active still, and as you made a note, both he and Weve used a sort of a reefing stitch which buckled the full thickness of the sclera into the eye. Exactly how long that would hold before the stitches pulled out I don't know.

Ernst Custodis and Charles L. Schepens

Pischel: The big step forward, I think was Custodis' idea of suturing a polyviol implant to the sclera, and treating the area with diathermy. This polyviol, which was dark in color, had a tendency to erode outwards, so you would see a buckle of dark material under the conjunctiva. That made it unpopular with many

people. Charles Schepens devised the idea of using silicone, and the silicone was much better tolerated, and, anyway, if it protruded at all, was a light color and didn't give a cosmetic blemish.

Hughes: *About the same time Custodis was doing something very similar, was he not?*

Pischel: Yes. He switched from his polyviol. I've got one of them still at the office. I never used them. I brought them home from Europe.

Hughes: *What was the difference in what Custodis and Schepens were doing?*

Pischel: Schepens was using silicone whereas Custodis was still using his polyviol—I think it's polyviol, not polyvinyl, but I'm not sure of that. You'd have to look it up.* So that difference was just the material. Schepens went ahead to implant scleral implants over a much larger area than Custodis had done, and he of course evolved the circling operation for which he deserve the credit of having started us all on that.

Hughes: *Do you remember what he first used for those circling operations?*

Pischel: Schepens?

Hughes: *Yes.*

Pischel: I think it was a plastic tube with a suture in it, and just what the material was I'm a little hesitant to say because I don't remember exactly what the tube was. It was probably some sort of polyethylene.

Hughes: *There was a problem of erosion with that as well, was there not?*

Pischel: Yes. They had erosions out, and unfortunately they had erosions in also, so that the tube would be inside the eye under the retina, sometimes lifting the retina off.

Hughes: *Is the purpose of all these procedures simply to move the vitreous against the retina?*

Pischel: Yes, move the vitreous against the retina or, shall we say, push the choroid up against the retina.

Hughes: *Why was it necessary to have these foreign materials permanently implanted?*

Pischel: Well, the idea was that if you removed them, as Jess did originally, it would flatten out and sometimes the adhesion between retina and choroid would tear loose, so keeping it there permanently was somewhat of a good idea. [tape interruption]

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* Duke-Elder and Dobree refer to a "polyviol implant." (Diseases of the Retina, 820.)

Hermengildo Arruga, Charles L. Schepens, P. Robb McDonald, and Harvey Lincoff

Pischel: Arruga, who was a very skillful and rapid surgeon, was a great disciple of Gonin. He was one of Gonin's great students. He modified the circling operation by putting a supramid thread which was tied around the eyeball, thereby producing inward buckling of the sclera and the choroid, pushing it up against the retina. The only difficulty with that was that a supramid thread was very small, and under tension it had a tendency to erode inwards, so that more than one case developed where the thread was inside the eyeball pulling the retina up from off the choroid. So that operation, which Arruga subsequently stopped doing, was abandoned because of that.

Anything you put under tension around the eyeball has a tendency to erode in. I know that in one of my cases in which I used too much diathermy when I had a circling tube with a suture in it according to Schepens, it eroded through and we could see it in the fundus. It was absolutely clear it had eroded through the retina and everything so the eye had lost all its vision.

Schepens not only had the circling operation but he evolved the idea of implanting other pieces of sponge of various materials under the circling element to produce a localized protuberance, preferably right in the region of the tear. We should correct this by saying, over the entire tear.

Robb McDonald, who was an early operator in detachment work in Philadelphia, had many good ideas about the various materials you should use.

I've forgotten the exact year when Harvey Lincoff in New York switched to cryopexy in place of diathermy. You may have that year somewhere.* This had the advantage that the sclera was not damaged as badly as it was by diathermy. Diathermy, of course, produces a small spot of scleral necrosis, but if you used a fine electrode and didn't place your applications too close together, the amount of scleral necrosis was negligible and I don't think ever caused any difficulty. It was when people used surface diathermy, for instance a ball electrode that was maybe a millimeter or a millimeter and a half in diameter, and used transscleral diathermy, with that procedure you obtained a tremendous amount of scleral damage. There it was occasionally that you got an outward buckling of the damaged sclera because the sclera is very slow to heal and seal itself, which was one of the reasons why many of us spoke against using surface diathermy. [tape interruption]

In a talk, I stressed the fact that surface diathermy caused a lot of necrosis, and that perforating diathermy, or partially penetrating diathermy, caused the least amount of scleral damage and was therefore the preferable method of use. I think that helped start people on being more concerned about how much damage they did to the sclera. [tape interruption]

* 1964. (S Duke-Elder, JH Dobree, Diseases of the Retina, 819.)

The Gonin Treatment and Its Modifications

Pischel: In 1929, at the International Congress of Ophthalmology in either Amsterdam or Brussels—I thought it was Brussels, but Duke-Elder says it was Amsterdam. My father attended the meeting, and that was where Gonin presented a hundred cured cases of retinal detachment. That, of course, set the ophthalmological world on its ears, and they all had to believe it. Previously he had reported twenty-five cured cases, and in '27 at the German Ophthalmological I think he had fifty.

Karl Lindner

Pischel: One of his early believers was Professor Karl Lindner in Vienna, who went back to Vienna after the '27 meeting, or maybe after the '25 meeting, and began to practice Gonin's treatment for retinal detachment. The only difference he made was that he used a galvanocautery instead of the Paquelin cautery, the galvanocautery being a loop of wire which was heated red hot by an electric current flowing through the wire. This was then plunged through the sclera just the way the Paquelin cautery, which was heated by benzene vapor, was heated red hot and plunged in through the sclera. The galvanocautery made a smaller opening, which was an advantage. You didn't have to get quite such a gush of fluid.

Kaspar and Dohrmann Pischel

Pischel: When my father returned from that meeting he also had been to Vienna and watched Lindner at work. So it was either in '29 or in early '30 that we did our first Gonin cautery puncture to cure retinal detachment. As I recall without going into absolute statistics, we did six of those operations and were able to cure three of them.

Hughes: *Was the first case the Chinese boy, whose story you told in the interview with Drs. Bettman and Spencer?*

Pischel: I remember about the Chinese boy. I don't remember if he was the first one or not.

Hughes: *Do you think he was one of the six?*

Pischel: Yes.

Hughes: *Do you think you should tell that story?*

Pischel: We had done a Gonin cautery puncture on this young Chinese boy who was a moderate myope, as I recall, and after the long stay in the hospital, which was not too difficult in those days—clinic patients I think paid three dollars a day, and private patients paid five dollars a day, so a two-week stay didn't amount to too much money. Anyway, we sent this boy home and told him to stay quiet at home, and we would come and see him. At that time Fred Boyle was in

training. I took him along with me when we were going to go to this Chinese boy's house. I recall that Fred Boyle had not changed from his white uniform as a resident, and I think that caused some consternation in Chinatown. They thought this was some sort of a law enforcement policeman in his white uniform.

We had difficulty finding the house, and it proved to be, I think, up on the third floor of a wooden structure. We had to go up the back steps and finally met the family, and they informed us that he had gone out to get a haircut. That, of course, was not what we had expected. They thought if we went down to the barber we might find him. They gave directions which we couldn't follow. When we got down on the street we were standing there trying to decide which way to go, and a Chinese boy came over to talk to us. This proved to be our patient's older brother. He said, were we looking for this young man? We said, yes, we were. He said he would go find him. He turned around, and sure enough, here was the boy coming back from having his haircut, and his older brother went over and cuffed him over the head and sent him back to his house, which of course scared Fred and me no end. But his retina had held. When we finally got up to the so-called apartment and examined the boy all was well. But that showed that the Gonin method did withstand considerable trauma.

I think the original statistics from Gonin were about sixty-five percent [cure], which, of course, compared to our eighties later, was very low, but that was sixty-five percent more than zero. The man who took over his practice years later after Gonin died and followed his patients said there were some relapses, so he thought that the score for Gonin's cases was closer to fifty-five, perhaps, than sixty-five. But, as I say, that was just fifty-five percent more than zero.

Hughes:: Dr. Pischel, did the fact that you cured three out of six cases create a stir in West Coast ophthalmology?

Pischel: Yes, because those were the first cases of retinal detachment that had ever been cured [here]. But that was well before the second war. [tape interruption]

Those six cases probably were spread over two years.

In 1932 I took an extended trip to Europe again, with my father taking care of the office. It was that time that I visited Gonin himself. By that time the big tide of observers and visitors had receded. This tide had swelled, of course, after his 1929 talk, until he was swamped. I visited him—it must have been right after New Year's of '32, I believe. He had his office, as the average European ophthalmologist did, in his own home, in a room that had probably been a big living room. He examined the patients there with indirect opthalmoscopy. The source of light was a gas lamp, and he used a reflecting ophthalmoscope which had a mirror of maybe a centimeter and a half or two centimeters. I remember talking about that, so this is a duplication.

Hughes: *Yes, you talked about that in session two.*

Pischel: After I returned from that trip, shortly after this, there was a meeting of the Pacific Coast Oto-Ophthalmological Society, and I read a paper on retinal detachments.* I think I had a large series of eighteen, maybe twelve or eighteen cases, of which I cured about half. That, of course, was where I was introduced as somebody who knew how to cure retinal detachments. Patients were kindly referred to me from all over the state and even outside the state.

Hughes: *Were you the only one doing retinal detachment for a number of years on the West Coast?*

Pischel: Yes. [tape interruption]

Clifford Walker

Pischel: About that time Cliff Walker also started doing retinal detachment work in Los Angeles. Cliff Walker had started out working under [Harvey] Cushing, so he was in a way a neuro-ophthalmologist. That was when he was back in Boston. Why he moved to Los Angeles I don't know, but he was in Los Angeles, and he read everything. He, from reading, undertook modifications of the Gonin operation. He was following in Safar's footsteps, who had published this thing about isolated electrodes which you put in a circle around the tear.

Cliff Walker introduced a pin which consisted of a coil of very fine platinum-iridium wire with one loose end with a sharp point. The other end had a loop on it to which a suture was fastened so you wouldn't lose this electrode. He had an instrument inserted into this coil, and with diathermy current would perforate the sclera, and he would put a series of these pins around the tear.

I think I must have gotten my idea of switching from Safar's pins, which were two parts with a platinum-iridium shaft and a disc two thirds of the way up the shaft of insulated material so you wouldn't cauterize the sclera too much. I discarded the idea of insulated material and just had the maker of these pins put a ring of wire around the shaft of the pin at different lengths from its tip so you could have a half a millimeter long pin, and a millimeter, and a millimeter and a half long pin. The other end of the pin was just a loop that you grasped with forceps. The forceps were connected with a wire to the Walker diathermy machine, and as you pressed it into the sclera, you pressed on the foot pedal that started the diathermy current, and in a fraction of a second, zzzt, you would be perforating. Then you would leave that in place and put another and another and another pin around the tear.

Hughes: *Did the Walker pin have that insulating material?*

Pischel: No, he didn't have any insulating material. He felt that the coil of wire touched the sclera so little it made no difference. And it didn't make any difference. He was right on that thing, so that Cliff started us on the right way there.

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* D Pischel. Present status of retinal detachment operations. Trans Pac Coast Oto-Ophthalmol Soc 1933; 114-38.

The Pischel Procedure

Pischel: We used the pins more and more. I can recall how we used to do it. We had the advantage in the United States that we could do these operations under general anesthesia. General anesthesia in Europe was very crude and they hadn't advanced to the good way of giving general anesthesia the way we had in the United States. The United States led in the development of general anesthesia. And we did our operations under avertin anesthesia.

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Pischel: The drug, avertin, was instilled via an enema. It was given through the rectum and was rapidly absorbed. In five or ten minutes the patient would go to sleep, and he would sleep all through the operation.

Hughes: You chose that particular anesthetic because it was long lasting?

Pischel: Yes, because it was long lasting and they didn't have to have any ether or chloroform or nitrous oxide gas around the face, so that we could operate around the head without the interference of the anesthetist. As a matter of fact, the anesthetist at this time, Dr. Wrethweln, was a very patient lady who would sit through the whole operation with her arm up under the patient's chin to hold the chin up so that his airway was clear. I recall that she would do that by the hour without complaining. She also would keep track of the number of pins we put in. As we put in the pin we would say, "Another, another, another." My memory is that the highlight was when I once used fifty pins in a rather extensive operation. I had long before discarded the idea of having a thread on those pins because a dozen or two threads in the way would be difficult, and that was one of the troubles with the Walker system. The threads would get in the way, and the pins would be pulled out, and the eye would get softened prematurely. So I just left the pins in and decided that keeping score I would be sure that we got them all out. [tape interruption]

After all your pins were in and you had pulled them all out, the eyeball, of course, was much softer because there was drainage from all the pin openings. As I remember, about half would drain for quite some minutes, and the eyeball would become quite soft. We sometimes pressed on the eyeball to express a little more subretinal fluid. I don't know exactly how long those pinholes stayed patent. It seems to me some ophthalmologist in Finland figured out that they stayed patent for three or four days. But I'm not sure of that.

Hughes: When you said that in one case you put in fifty pins, is that simply a function of the size of the break?

Pischel: Yes. I had a large area to cover. I don't recall what it was, but it may have been an oral disinsertion, which of course may have covered almost a quadrant of the peripheral retina, so that one would have to put in a very long barrage. Of course, in the case of multiple holes in the degenerate area of retina you had to surround a very large area of retina. This was really just a modification of Lindner's walling off operation which he did with his potassium hydroxide

where he would get a barrage of exudate from the potassium hydroxide solution, and that would wall off that part of the diseased fundus from the healthy central part of the fundus. It was, I think, Lindner's idea.

Anyway, a number of us realized that sometimes the holes would remain open, but your barrage had successfully sealed off the diseased part of the retina from the healthy part of the retina by this continuous barrage of retinal-choroidal adhesions that you had produced by your diathermy. That that was the case was definitely proven by a patient I saw two or three years ago when she was back at the office. That was about ten or fifteen years after my operation, and the peripheral part with the hole in it was still open, but her central part had held all those years in spite of her activity. Unfortunately, she passed away a few months after our last visit, but I was glad to have that proof that a barrage creating a new ora serrata, we might say, was a permanent thing. Of course, one case doesn't prove anything, but this was just the most dramatic case that I can cite.

Hughes: *Were these punctures painful once the anesthetic wore off?*

Pischel: No. It was surprising how little pain the patients had. The sclera, after all, has very few nerve fibers, so there would not be that to contend with, and the swelling of all the eye tissues was perhaps the most uncomfortable part for the patient. The conjunctiva would be puffed way out. It sometimes came out from between the lids.

Hughes: *Could we go back to the beginning of the procedure, the prescription of bedrest before the operation. Could you tell me the rationale behind that?*

Pischel: Yes. We used to put patients to bed with binocular bandage for two or three or four days before an operation. We knew from Lindner's work that it was motion of the eye that caused the detachment to stay elevated or caused it to spread. In the overwhelming majority of patients, if you put them to bed, preferably lying in a position so the retinal hole was in the dependent part of the eye—that is, if it were on the temporal side, the patient would lie on that side. If he was lucky enough to have the hole inferiorly, he was sitting up in bed. With the binocular bandages the eyes did not move and the retina settled very appreciably so that the localization of the tear was much more accurate and one had to depend very little upon the settling of the retina postoperatively because it had settled considerably preoperatively. So we considered that a real, good step forward.

Hughes: *Was the localization procedure something that you had learned from Lindner, or did you develop your own methodology?*

Pischel: Well, all of us who were doing detachment work had our own little idiosyncrasies, but it all stemmed from Gonin's original work. At the time of Gonin's operation, when he had estimated from examining the fundus with his indirect reflecting ophthalmoscope, had localized the tear by hours of the clock—say he localized it at eleven o'clock, and then he estimated how many disc diameters it was from the ora serrata. Then at the time of the operation he would measure back from the limbus the proper number of millimeters. That localization was the important part. We realized you had to do your punctures in or around the area of the tear.

In the beginning I also estimated where the tear or the retinal break was according to Gonin's method. Then we evolved a method of looking in, and at the same time you or your assistant would press on the eyeball with, say, a strabismus hook, or later with a very blunt electrode, and you could tell where the sclera was buckling in. When the pressure was at the right place, you kept the electrode, or whatever instrument you were using to press in, on that place on the eyeball, and then exposed that area, and you could see where you had been pressing. You got quite an accurate localization in that manner.

Hughes: *I read somewhere that the Europeans were less precise about their localization.*

Pischel: Maybe we took more pains, but I think the leaders there, like Weve and Arruga, were very, very cautious about their localizations.

Hughes: *And then you made a drawing?*

Pischel: No. You made your drawing of the detachment before you sent the patient to the hospital. The procedure I was talking about, localizing, you did at the time of your operation where you were just perfecting the exact localization of the tear and where you wanted to put your barrage of diathermy. So the position of the tear was modified slightly. Fortunately for the patient and for us, as the retina settled out, the tear usually—[sound of rustling paper] as one can see from a buckling piece of paper—moved anteriorly, so it was easier to reach than one might have thought when one was looking into the fundus at the first examination and it looked to be very central.

Hughes: *In 1952 you published a paper in which you listed five prerequisites for successful treatment of retinal breaks.* One was production of an exudative choroiditis. Two, production of the choroiditis at the proper place. Three, contacts of the retinal tear with this choroiditis. Four, continuing contact until firm adhesion between retina and choroid is established. Five, a watertight adhesion.*

Pischel: That was true for that time and is true today. The changes today, of course, are that there's more inward buckling of the sclera so the retina doesn't have to settle so much; and the more rapid action, perhaps, of the diathermy we use today, or of the cryo[thermy], so that it would seal the tear very quickly.

Hughes: *Had you distilled those principles from the work of Lindner and others?*

Pischel: Yes. I got those five principles, if you want to call it that, from what I had observed, and from personal experience.

Hughes: *Did you teach those principles?*

Pischel: I used to stress them as much as I could in all my talks. I talked a great deal but I wrote very little.

Hughes: *How did you ensure that the adhesion was watertight?*

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* DK Pischel. Treatment of retinal detachments. Localization of breaks, description of a typical operative procedure. Trans Am Acad Ophthalmol Otolaryngol 1952; 56:419-31.

Pischel: You wanted to be sure when you examined the patient with the ophthalmoscope that you didn't see any part of the retinal break still open. It was by observation, and, of course, if the detachment began to recur, you would feel that you had not sealed it completely even if on inspection you couldn't see any obvious leak.

Hughes: And then you would go back?

Pischel: You would have to go back in. When did we get photocoagulation?

*Hughes: Late fifties.**

Pischel: When you weren't sure that the break was completely sealed you could just put a barrage of photocoagulation around it. In the days before that, every reoperation was always more difficult because of the adhesions, and was more painful postoperatively to the patients. So you hesitated to do any reoperating you didn't have to do. We welcomed with open arms the photocoagulation, because it was a comparatively painless procedure.

Hughes: I was wondering if you could say something about the classification of cases of retinal detachment. Apparently it was a rather controversial subject, I suppose because there was so much personal judgment involved in deciding whether a case was simple or relatively complicated or very complicated.

Pischel: What you just said brings to mind a statement I frequently made, "Is any retinal detachment simple?"

But there would be the cases in which a detachment with just overnight bedrest would settle appreciably, and you would feel, well, here's a very favorable case. Let's not call it simple; call it favorable. Cases where the retina didn't settle at all, or cases where you could see, as we later were able to develop examining with the slit lamp and contact glass, vitreous strands attached to the flap of the retinal break—when one could see things like that, one realized that this was a more unfavorable case than the favorable cases.

Since secondary operations were very difficult, you would be inclined with the first operation to be more radical, to do something like Lindner's eyeball shortening operation as your primary procedure. There was considerable controversy about that—should one undertake such a difficult and complicated operation as the primary operation? But that depended upon your own judgment. If you felt, yes, it was better to do the added treatment, and take the added time in the operating room and the slightly greater risk of complications in order to be more reasonably sure that you could cure that more unfavorable case, then you would feel justified in doing a radical operation.

Hughes: Did people spend much energy arguing about classification?

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* Dr. Pischel's first publication on photocoagulation appeared in 1959. (DK Pischel, BH Colyear Jr., Clinical results of light coagulation therapy. Trans Pac Coast Oto-Ophthalmol Soc 1959; 40:63-71.)

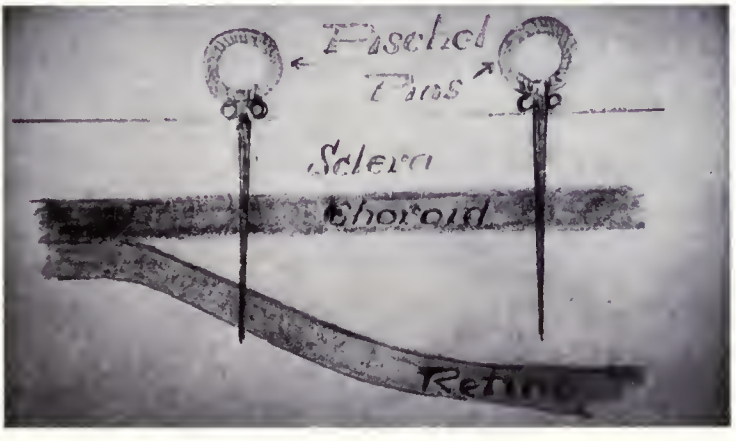
Pischel: Oh, yes. It depended upon the personality of the speaker. Some people like to argue at great length about verbal differences, but usually when it came down to the actual operation, there was not so much divergence of opinion. [tape interruption]

Pischel and Walker Pins*

Hughes: *I heard that a dentist originally made the Pischel pins.*

Pischel: Yes.

Hughes: *How did that come about?*



Drawing of Pischel Pins,
artist and date unknown.

Pischel: A dentist [E. Vandevere], who did his own work, made the pins. It was hard to get anybody to work on these tiny things. A big one would be two millimeters long from one end of the shaft to the other, and when you got down to working with the half millimeters, it was really very difficult. But finally the work was undertaken by the firm of Trainer-Parsons, who were opticians. I should remember the man who used to do that work, but I can't remember at all who he was. But that's not important. It was hard to find a person who was willing to work meticulously in dimensions of half a millimeter.

Hughes: *You also mentioned the Walker pins. Was there competition between the Pischel and the Walker pins?*

Pischel: Oh, yes. It was strange, but Walker thought his type of pin was better than the Pischel pins, and Dr. Pischel for some reason thought his were superior.

* A collection of Pischel pins, donated by Dr. Pischel, are preserved in The Museum of Ophthalmology of The Foundation of the American Academy of Ophthalmology, San Francisco.

Hughes: *[laughs]*

Pischel: So we each stuck to our own pins and people would follow the man that they had listened to last, I think.

Hughes: *And were they the only two types of pins used in the United States?*

Pischel: Yes, I think so. The principle was that you had a perforating pin that you could leave in place. It didn't matter what model it was. If it worked it worked.

Hughes: *The skill in not perforating the retina was in choosing the correct length pin?*

Pischel: Yes, so it would perforate the choroid and not go through to the retina. That was important. And because as you put the pin in and before you turned your current off, the point of the pin would be through the choroid already, if the retina were too close it would burn a new hole in the retina. That was not such a bad complication, because if the retina was that close to the choroid, as it settled down, there was the exudate to seal the additional hole you had made.

Competing Procedural Modifications

Hughes: *When I talked to Dr. [Bayard H.] Colyear, he said something to the effect—and, of course, I'm paraphrasing—that the Boston school, and I suppose that means Schepens, didn't approve of pins.*

Pischel: Dr. Schepens did not approve of the Pischel pins. He was using his own way of making trephine openings or single perforations with diathermy. But, as I say, if you follow carefully and did what you thought was accurate localization, various methods were able to obtain cures in eighty percent of your cases.

Hughes: *What was his argument with the Pischel pins?*

Pischel: I don't like to quote Charles Schepens when he isn't here, but I think he probably felt they were a nuisance and in the way and unnecessary.

Hughes: *How did he perform drainage of the subretinal fluid?*

Pischel: Here I'm on uncertain ground because I don't remember exactly. He either drained through a diathermy puncture or through an incision through the sclera or even maybe a trephine opening through the sclera. I doubt if he used the trephine opening because Lindner had used that.

Hughes: *Above and beyond the pin question, was there any degree of competition between you and your group, and Schepens and what I understand was quite a sizable group of followers?*

Pischel: Well, as I said, what any good ophthalmologist did was observe something, go to a place where they were doing a type of work that he was interested in, and he would observe what was being done at this place, and then when he went home he would naturally follow what he had seen. So the people who had visited Dr. Schepens and nobody else would follow his technique, and people who visited my group would follow our diathermy technique because they

hadn't seen anything else. And then there was the comparatively smaller group of people who went to both places, and some would choose one thing, some would choose the other, and some would make their own modifications—just the way William Everett made modifications after he had been visiting both places.

Hughes: *Wasn't it Custodis who maintained that it was unnecessary to drain off the subretinal fluid?*

Pischel: Yes. That was most amazing. I'm on uncertain ground whether he stuck with that always. But, as I mentioned earlier, he was the man who did an external exoplant on the sclera to push the sclera and choroid up to the retina. Of course, he had the advantage there that hospitalization was easy. You had your clinic and somebody was going to pay the bill. The patient himself practically never paid the bill. There was some form of insurance that almost everybody had in Germany, or the state or the county would pay the bill. So he didn't have to worry about bedrest, and as I remember he had them in bed for a day or two before the operation.

I personally saw Custodis. He was a very kind and gracious gentleman. I saw this patient before he operated on him for a typical type one detachment, with a bulla and an isolated retinal break. He did his operation of planting the polyviol externally, and the next day he allowed me to see the patient, and lo and behold, the detachment was gone. The retina was settled down on this buckle, and from his cauterization with potassium hydroxide it would be sealed.

Hughes: *How do you explain the disappearance of the subretinal fluid?*

Pischel: As I've said before, if the eye is immobilized, the retina has a tendency to settle out because as the eye rolls around as you look around it keeps the retina loose. As it was found out over a century ago, putting the patient to bed for a while, some detachments disappeared completely when the patient didn't use the eyes. That was what happened in the days of dehydration where you dehydrated the patient to such an extent that he could hardly move. He would lie there in a semicomatose condition, preferably in a position so that the tear in the retina was down, and very occasionally the detachment would be gone.

The Eyeball Shortening Operation

Hughes: *What did you do in cases where the retina did not settle out?*

Pischel: Well, that was where the eyeball shortening operation in those days came into play. You counted on shortening the eyeball so if the lining were less, if you shrunk the outside wall, it would shape itself to fit the shrunken lining. If you visualize a man or a woman's felt hat with a silk lining, if the silk lining is shrunken and no longer fits the felt, if you take a crescent of felt out of the hat, the dome of the hat will be that much less and will fit the shrunken silk lining. You're fitting the outside layer to the inside layer instead of trying to fit the inside layer to the outside layer.

Pischel and Kronfeld Electrodes

Hughes: *I saw reference to the Pischel electrode.*

Pischel: Well, there were the Pischel electrodes; there were the Kronfeld electrodes, and as I used to say in my lectures, there's a great essential difference between the two. One was named after Peter Kronfeld, who had a great brain, and the other one was named after me—and we won't mention that part. But they were identical. I think one was made by Mueller, and the other was made by some other instrument firm. I've forgotten whether Peter Kronfeld's were made by Mueller or mine were made by Mueller in Chicago. Peter Kronfeld was in Chicago, one of the brightest men in his day.

Hughes: *But there was no functional difference between the two?*

Pischel: No, they were just the same. The whole thing was, there was a base. The electrode had a right angle curve right at its tip, maybe a two millimeter long curve. Then at the tip everything was ground away but a very fine needle point. Then the needle point was of different lengths—a half a millimeter, a quarter millimeter, three quarters of a millimeter, or a millimeter long. And you had a few one and a half to two millimeter long pins protruding from the base of this end of the electrode.

Hughes: *Did you patent the electrode and the pins?*

Pischel: Heavens, no! In those days, when you were a good doctor of medicine, you didn't patent anything that you had evolved.

Hughes: *And you always stuck to that?*

Pischel: Yes.

Advances in Treatment

Hughes: *The paper that I showed you by Edward Norton,* which was the transcription of the Proctor Foundation Lecture which he gave in 1975, listed three major advances—his ideas, of course—in the diagnosis and treatment of retinal diseases since World War II. [tape interruption] The three most important advances in his opinion, were fundus examination by binocular stereoscopic indirect ophthalmoscopy, which was first advanced by Schepens in 1946.*

Pischel: Yes.

Hughes: *Then the second advance was the origin of a scleral buckling procedure as we currently conceive it, and he credits Custodis for that. We've already talked about that. The third point, which we will talk about in a bit, I hope, was photocoagulation, which, of course, was developed by Meyer-Schwickerath.*

* The past twenty-five years of surgery. Am J. Ophthalmol 1975; 80:450-59.

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Hughes: *Please comment on whether you would agree with Dr. Norton about these being fundamental advances. Would there be any others that you would add?*

Pischel: No, I think Ed Norton as usual hit the nail on the head. Those were certainly true, and the last thing he mentioned, the development of photocoagulation, was in my opinion as major a step as Gonin's step of sealing the retinal hole.

Binocular Stereoscopic Indirect Ophthalmoscopy

Hughes: *Why was binocular stereoscopic indirect ophthalmoscopy so important?*

Pischel: Well, the first thing was, and one thing that Schepens stressed, was that you had to take time to do the examination. So he stressed the fact that you had to spend time examining the fundus, not merely just glancing in and saying, "Oh, yes, there's the retinal break. Let's go." He stressed examining it thoroughly, and he had the advantage of the stereoscopic view.

That was counterbalanced with the disadvantage that the magnification was much less than when you used the direct ophthalmoscope. Those of us who were used to the direct opthalmoscope with a magnification of anywhere from eleven to sixteen times, then to be presented with a picture with a magnification of three to five times, you had to get used to that. But there were many advantages that the binocular microscope had.

Hughes: *Did you use the binocular 'scope?*

Pischel: Yes, I used it. I did not use it exclusively as many people did who didn't know how to use the direct ophthalmoscope correctly, which required a certain gymnastic ability to curl yourself around in different angles to be able to see the periphery of the retina. If you were eager enough and energetic enough, you could examine the fundus very well with a comparatively big field and a high magnification. Frankly, I depended more on my direct ophthalmoscopy than I did on my indirect ophthalmoscopy.

Hughes: *And yet the field would be smaller than it would be with the binocular, was that not true?*

Pischel: That's right, you had a smaller field.

Hughes: *But the great advantage was the higher magnification?*

Pischel: The higher magnification. There again, it was a personal matter of what were you used to, what did you in your hands do best? As I said many times, when you've evolved a technique that you can do well and better than any other technique, stick to that technique.

Hughes: *What did you do in reference to your residents after the binocular 'scope came in?*

Pischel: Well, we urged them to be proficient in both.

Hughes: *Do you think they followed in your footsteps in most cases and used both techniques, or did they eventually choose one over the other?*

Pischel: I think most of them would choose one over the other, but some followed my footsteps and were good at both.

Hughes: *Do you have anything to add to Dr. Norton's list of advances?*

Pischel: No, I think he covered it very well with those three statements.

Slit Lamp Examinations

Hughes: *Dr. Norton commented that the United States—and, of course, he's referring to the community of ophthalmologists—was slow in using biomicroscopic slit lamp examinations of the vitreous and ocular fundus, and especially the Goldmann three-mirror lens for examining the peripheral fundus. Why was there that lag?*

Pischel: I didn't think American ophthalmologists as a whole, that is, the leaders in ophthalmology, were slow in adopting slit lamp examination of the fundus. I think I gave a couple of talks on that subject myself in the early days, and I frankly can't remember just when we started using the contact lens. But in our office practice that was a routine after we had done all the fundus examination we could. We would use the contact glass because that often left a little film of the solution you used under your contact glass on the cornea, so examining with the contact glass removed was not as good before. So that was the last thing you did. The patient proceeded from the dark room where we had been examining. We proceeded to put him in front of the slit lamp and put on the contact lens.

Hughes: *What is the Goldmann three-mirror lens that he refers to?*

Pischel: Well, it's a lens in which three mirrors are embedded so you can examine the extreme periphery, the mid-periphery, and the third one was for examination of the more posterior periphery of the fundus, with the slit lamp.

Hughes: *Could you see the periphery with a direct ophthalmoscope?*

Pischel: I felt I could see the periphery reasonably well in almost all cases if the pupil could be dilated well. I don't know when we started using pressure to indent the sclera, but we used pressure on the eyeball, and that would bring the ora serrata into view with the direct ophthalmoscope.

Hughes: *I saw that term, scleral depression, and was wondering about it. You just answered my question.*

Pischel: Yes, you used scleral depression so that you could examine the periphery of the eye.

Hughes: *Scleral depression seems a rather obvious thing to do. Why was it so late in coming?*

Pischel: Why didn't one do it oftener?

Hughes: *Or earlier?*

Pischel: Actually Gonin did a little sclera depression when he was localizing for his operation.

Hughes: *Was it thought to be harmful?*

Pischel: Well, it was uncomfortable to the patient.

Hughes: *That was the main reason for not using it often?*

Pischel: Yes. You mention harmful and, of course, the opponents of it would say you're depressing in there and doing just what caused the tear in the retina in a first place.

Hughes: *But it didn't seem to activate the tear?*

Pischel: Those of us who did it did not feel it aggravated the situation. We thought it was an asset. [tape interruption]

Hughes: *Dr. Pischel, do you think patients today are receiving too much prophylactic treatment for retinal breaks?*

Pischel: I think that anything you start doing for the first time may become so interesting and pleasant for you to do that you might overdo it. But that again is very much a personal matter. If you feel that a patient has a lesion in the fundus, it's a personal opinion as to whether that particular patient is safer without any treatment or with a treatment. There are risks on both sides of that coin. Doing nothing may lead to the development of an obvious retinal detachment. Doing something may cause a train of circumstances, which has been mentioned by other people, that even if you treat far on the periphery of the eye with photocoagulation or laser, you set up something wrong and develop a macular degeneration. I think that is very, very difficult to evaluate, because people who have problems in the periphery of the eye developed macular trouble before any treatment was in use. So I equivocate on the answer to that question. I personally was more in favor of active treatment than of observation.

Hughes: *In the case of prophylactic treatment, was it usually photocoagulation?*

Pischel: When photocoagulation came in it was.

Cryocoagulation

Pischel: Previous to that, cryocoagulation was done, as Harvey Lincoff in New York sponsored, and more radical prophylactic treatment would be using diathermy.

Hughes: *What was the apparatus for cryocoagulation?*

Pischel: Well, the apparatus—that was one of the advantages of it—was very simple. You had a hollow pencil, a metal pencil, which was crammed with carbon dioxide snow, which you produced right there by letting carbon dioxide be directed out of the carbon dioxide bottle onto some container, and the snow would build up there, and you could push that into your hollow pencil until there was a little protrusion of carbon dioxide snow at the end, and you just applied this. At first they thought you had to apply it directly to the sclera, so you had to do a conjunctival incision, but then they found out you could apply it through the conjunctiva, as the conjunctiva was fairly resistant to any damage. The cold would freeze through the sclera and would get to the choroid and cause the exudative choroiditis that, as I've mentioned before, was one of the necessary things to heal the tear in a retinal detachment.

The Gonin-Lindner-Safar Procedure

Hughes: *From Dr. [Jerome] Bettman I heard that you taught the Gonin procedure. Or would it be more correct to say the Gonin-Safar procedure?*

Pischel: No, properly it would be the Gonin-Lindner-Safar procedure.

Hughes: *You taught it to anyone who wanted to learn it; you were very free with the information, spreading the technique.*

Pischel: I certainly was. I felt I'd had a chance to learn this thing and it was my duty to help disseminate this knowledge. I think there's no question about that.

Hughes: *What was the immediate reception amongst American ophthalmologists? This would be immediately post-1929 and the Amsterdam meeting.*

Pischel: Well, most people felt this was a rather heroic treatment and hesitated to try it. But it was done on both coasts of the United States. Arnold Knapp in New York was one of the early ophthalmologists who took up Gonin's cautery puncture. I think somebody in Philadelphia in the early days was doing it, too. I can't recall exactly who it was. It wasn't de Schweinitz. It was after de Schweinitz's time.

But it was a radical thing. If you've ever seen that done, putting a red hot cautery through the sclera and seeing the fluid bubble out and steam come was a little harrowing until you got used to the picture. So you can see that anybody doing it for the first time was very hesitant about doing it at all. It was only after he had done it once, and then twice, and so on, that he became confident in being able to do it without harming the eye irreparably.

Hughes: *Did you have a lot of visitors in the office and at the university?*

Pischel: I had a few. I don't think I had a tremendous number.

Hughes: *They were attracted by the Gonin-Lindner-Safar procedure?*

Pischel: Yes.

Hughes: *Dr. Colyear said that Harry Gradle wrote a scathing article in the* American Journal of Ophthalmology. *I don't think he mentioned you by name, but the gist of the article apparently was that people such as yourself who were importing Gonin's procedure were wrong. I haven't seen the article, so I'm just paraphrasing what Dr. Colyear said.*

Pischel: Well, Harry Gradle was one of the last of the active prominent ophthalmologists to take up treating of retinal detachment. I think in part it was because he was so darn busy. He had this tremendous practice. He was so busy I don't think he had time to give to prolonged examinations of the eyes. And he was skeptical about this treatment of retinal detachment. But Harry Gradle and I were good friends at the end and I admired his ability very much.

Hughes: *Were you ever interested in doing research on the pathogenesis of retinal detachment?*

Pischel: Well, it depends on what you mean by the pathogenesis of retinal detachment. I didn't do any work on the microscopic examination of eyes that had had a retinal detachment and were enucleated for one reason or the other. Some people—I can't recall exactly whom—wrote some long articles about the histological changes that one could find. I freely confess that I was more a healer of the sick than an investigator.

Discussion of Specific Papers

Hughes: *Of course, you wrote many papers on retinal detachment. For example, in 1939 you reported on thirty-seven cures using the Safar method of multiple diathermy puncture in sixty-three unselected consecutive cases.* I'm assuming that this was a very impressive number for 1939.*

Pischel: Fifty percent plus.

Hughes: *Yes.*

Pischel: Well, as I have said right along, these figures are small, but they're that much more than zero percent, which was what it used to be.

Hughes: *Nine years later, in 1948, with Ruth Appleby, you wrote a paper whose title is, "Review of a hundred cases of retinal detachment,"** in which you mention the percent of cured cases. For the period, that was a large number of cures, was it not?*

Pischel: It was, and I think in that paper it was around eighty-five percent. I don't remember the exact percentage. Maybe it was eighty-two percent cures.

Hughes: *Who was Ruth Appleby?*

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* DK Pischel. Late results in retinal detachment operations. Am J Ophthalmol 1939;22:130-4.

** R Appleby and DK Pischel. Review of one hundred cases of retinal detachment. Am J Ophthalmol 1948;31:796-804.

Pischel: She was a very charming lady who was one of our residents, and one of the most skillful operators I've ever seen. She had wonderful hands. I don't mean hula hands, but in her operating she was very, very deft, and she learned very quickly. She was one of the best residents I think we turned out at Stanford. But she didn't keep up her active practice as long as she should have. That's what I've told her.

Women Ophthalmologists

Hughes: *Was it unusual in those days to have women in ophthalmology?*

Pischel: Yes. There were Ruth Appleby, Miriam Miller, and Gaynelle Robertson. I'm trying to think in my day if we had any other women. Women went into pediatrics and gynecology, but they didn't go into ophthalmology.

Hughes: *Now, was that the woman's choice, or was the specialty sometimes not particularly receptive to the admission of women?*

Pischel: If it was the woman's choice, you could tell that. I think they naturally drifted to pediatrics because the other women doctors they knew were pediatricians or gynecologists, and so they felt: Well, this is a good place for me to go. So there were very few applications of women to ophthalmology. In self-defense, I hasten to say I can't recall for the few years where I was appointing residents, that I ever turned down a woman applicant. I have a dim memory—it seems to me that I was about to take one woman who then subsequently went to Texas or Boston or somewhere. I am not an antifeminist.

Hughes: *Are you aware or were you aware of any feeling in the field of ophthalmology as a whole against the acceptance of women?*

Pischel: No. We didn't have this intensive NOW [National Organization for Women]. If a woman went into medicine, and if she was good, she was accepted. But there were very few. I just can't remember names. But in Chicago there were two women, Bertha Anne Klien and Georgiana Dvorak Theobald, who were very brilliant people and very good.

Photocoagulation

[Interview 4: January 28, 1987]##

Gerd Meyer-Schwickerath

Hughes: *Dr. Pischel, I'm wondering when you first visited Meyer-Schwickerath to learn more about photocoagulation?*

Pischel: It was '57 when I had the opportunity of visiting Meyer-Schwickerath when he was in Bonn working under Professor Mueller. This is not the Leopold Mueller of eyeball shortening; this is Karl Mueller, who was professor in Bonn.

Meyer-Schwickerath had the early Zeiss photocoagulation machine at that time, and it was at that time, also, where I was able to visit Dr. Hans Littmann at the Zeiss West Germany Works in Oberkochen who showed me the machine and how they were making it.

That was the way we were able to get three machines which were sent to the United States. One went to Graham Clark in New York; another one went to the group headed by Dupont Guerry in Richmond, Virginia. There was a German doctor there who was working then on photocoagulation in some stage, and that's why he was interested in getting one. The third machine came out to us in San Francisco.

Hughes: *Did you make arrangements when you were at Zeiss to have them sent?*

Pischel: Yes, as a matter of fact, the three machines that Zeiss was willing to send to the United States were taken off the list of the Europeans who wanted the machines. I believe my machine was supposed to go to somebody in Italy who, to his dying day, probably wondered why he didn't get a machine. [laughs] So it was due to Meyer-Schwickerath's intervention that we were able to get started here in the United States at an early date with all that photocoagulation.

Hughes: *How had you heard about photocoagulation?*

Pischel: Well, I can't remember how I heard about it exactly. I had met Dr. Meyer-Schwickerath in New York. It was at the joint meeting where we started the meeting of the International Congress of Ophthalmology up in Canada and finished it in New York City. I've forgotten the exact year. Meyer-Schwickerath was there as a young man, and I know I discussed treatment of retinal detachment with him. He was already interested in trying to use photocoagulation at the time.

Hughes: *Do you remember what stage the machine was in at that point?*

Pischel: I may be wrong, but I think he was still using sunlight. At that time, he was working in Hamburg under [Oswald] Marchesani. Marchesani had delegated all the retina work to Meyer-Schwickerath. They were at a big handicap because sunlight is a rare commodity in Hamburg. As he himself says in his letter, frequently when they were all set to use the sunlight, a cloud would come in and obscure the sun and everything was over for that particular day. So, due to the poor sunlight in Hamburg—and I shouldn't run down Hamburg where some of my ancestors came from—he started using a carbon arc machine. That was the first photocoagulation machine.

Hughes: *Is that something that he arranged on his own? Zeiss was not in the picture at that stage?*

Pischel: No. I think he did that himself or he may have done it with Dr. Littmann at Zeiss. Littmann said that anybody can make a light source, but to make the lenses requires the know-how of Zeiss. Well, he was fairly correct: It requires a lot of know-how to get all the lenses made, but also you have to know something about light.

The big breakthrough really came from the movie industry because the big powerful lamp that was put into the photocoagulating machine by Zeiss was originally designed for use in movie theatres where they needed a lot of light to project a picture a hundred feet away. When that bulb became available, it simplified matters tremendously, and all they had to do then was to get the lenses in proper shape and the machine was working.

Hughes: *That lamp would have come in sometime in the fifties?*

Pischel: In the late fifties, yes.

Hughes: *In 1958 Dr. Meyer-Schwickerath gave an address before the American Academy of Ophthalmology and Otolaryngology*, and apparently you made the arrangements for that address?*

Pischel: I don't know all the details, but I'm sure that I helped suggest it.

Hughes: *Do you remember how his paper was received?*

Pischel: Well, I think it was received with considerable enthusiasm, also with some skepticism as all new things generate a lot of skeptics. But I can't remember the details of his presentation at all.

Hughes: *Were you using photocoagulation in 1958?*

Pischel: Our machine, I think, came to us in 1958 and whether we had it already at the time of the meeting in Chicago or whether it was right afterwards, I can't recall.

Hughes: *Did you actually observe the use of the machine on patients when you were in Bonn visiting Meyer-Schwickerath?*

Pischel: Yes. He was very gracious and allowed me to come in and see how they were treating things so that I could see just how to use the machine.

Hughes: *Is it true that one of the three machines exploded? Is that a myth?*

Pischel: I think that's a myth. I'm sure it wasn't mine, and I'm sure it wasn't Graham Clark's in New York. That would limit it to the one in Richmond, Virginia, and I don't think it exploded there, but it may have. I don't know.

Hughes: *Was that a problem with the machine?*

Pischel: No. I hadn't heard of it until you mentioned it now.

Hughes: *I think it was Dr. Colyear who gave me that idea.*

Pischel: Well, they may, of course, have heated it up too hot and run it too long.

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* G Meyer-Schwickerath. Indications and limitations of light coagulation of the retina. Trans Am Acad Ophthalmol Otolargyngol 1959; 63:725-38.

The Procedure

Hughes: *Would you describe the procedure of photocoagulation?*

Pischel: With the original Zeiss machine, of course, like any examination of the back of the eyes or the fundus, to see the retina you had to have a well-dilated pupil. The patient was lying on his or her back on a moveable guerney, as we called it. Then the arm of the photocoagulator had to be moved, as it could be moved, so that you could get close to the eye using direct ophthalmoscopy—not indirect ophthalmoscopy. So you hunched over right on top of the patient, and you then could see the area in the fundus and the part of the retina you wanted to treat.

There was a button on the handle of the machine, and as you pressed the button a filter came up to keep the light from going into your eye, and then this blast of light went into the patient's eye. The patient's lens would focus it so that it would come to a focus on the retina. You could observe the blanching of the retina, and when you had found that it had blanched enough, then you released the button and that particular application was over. So you could make a whole series of applications in that particular eye—surrounding a tear or right in the middle of a tear or walling off a whole area of retina.

Hughes: *What were the advantages over diathermy?*

Pischel: It did not require any surgical intervention. You didn't have to dissect off the conjunctiva to get at the sclera, so you could apply your diathermy electrode with great accuracy through the sclera. It was, of course, possible to put the diathermy through conjunctiva and sclera but that was very uncertain as to dosage. So the great advantage of the photocoagulation was that you could observe the reaction as it occurred and limit the application until you got the amount of reaction you felt was necessary. That was the overwhelming advantage of photocoagulation.

Hughes: *Was anesthesia used?*

Pischel: Well, the only anesthesia for adults was topical anesthesia. You put drops in the patient's eye and then you did a retrobulbar injection of some form of novocaine. There were so many new types of novocaine. That not only immobilized the eye but kept the patient from seeing this full blast of light which was a rather difficult thing for a patient to tolerate if he didn't have a retrobulbar injection.

Hughes: *Did the head have to be stabilized?*

Pischel: The head you had braced with pillows. As I said, after the retrobulbar injection the patient didn't notice the light to any great extent so he didn't tend to move his head, and the retrobulbar anesthesia had made it impossible for the patient to move his eye, so that part was very simple. Everything was in favor of this very simple photocoagulation technique.

Limitations

Hughes: *There were limitations, however, which you described in some papers.* Photocoagulation certainly wasn't the solution to every problem of retinal detachment, was it?*

Pischel: No, it wasn't possible to use it in all cases. If, for instance, the lens in the patient's eye was somewhat opaque from a cataract, you couldn't get enough light through. Also, you couldn't see well enough to focus accurately and be sure you were putting your coagulations in the right place. Also, you could not get to the utmost periphery very easily.

When indentation of the sclera became popular we were able to reach the ora serrata with our photocoagulation, but that by itself was sometimes a painful procedure for the patient even if you had adequate anesthesia. So there were some limitations to it, but really it was almost boundless as it developed; you could do just about everything you wanted to.

Hughes: *Another limitation that I read about in your papers was when the retina did not settle and there was considerable subretinal fluid then photocoagulation was not successful.*

Pischel: Yes. For photocoagulation to be successful, the retina had to be practically in contact with the choroid. If there was a bullous elevation or even a moderate elevation of three or four diopters, photocoagulation was not indicated. That was a limitation because you wanted to be sure that the exudate stirred up by your photocoagulation could contact the retina and "glue it" into place.

Hughes: *But that would have been true of diathermy as well, would it not?*

Pischel: Yes, it was true of diathermy also, except that with diathermy you would then with your perforations drain the subretinal fluid, and the retina almost always would settle back into place so that the retina came in contact with the exudate caused by the diathermy.

The unsuccessful diathermy cases would be those in which the retina did not settle down because of vitreous traction or strands of scar tissue inside the eyeball, strands in the vitreous pulling on the retina so it couldn't settle down.

Hughes: *Then you would resort to a more drastic operation, such as eyeball shortening?*

Pischel: Yes. You might have to do an eyeball-shortening operation, or you'd have to inject something into the interior of the eye in front of the retina to push it back into place.

One of the early things that was suggested was injecting air, and that was very successful. You would inject air and that would push the retina back into place. You may ask at this point, wouldn't the air go out through the tear, the break in the retina? If the break were big, yes, the air would go out. But it was

* See, for example: D Pischel, BH Colyear. Clinical results of light coagulation therapy. Trans Pac Coast Oto-Ophthalmol Soc 1959; 40:63-71. BH Colyear, D Pischel. Photocoagulation as an adjunct in retinal detachment surgery. Am J Ophthalmol 1961; 52;474-9.

surprising how well the surface tension bridged over the usual retinal break so that even if the retina were elevated and you started slowly injecting your air, it would push the retina well back into place. Once, of course, it was in contact with the choroid, then the pressure of the air just held it in place.

Hughes: *If air was successful, why did people then move to other materials?*

Pischel: One of the things that was a disadvantage with air was that it was being absorbed. So a gas, sulfur hexafluoride, was developed which would gradually with time expand. Instead of being absorbed, it expanded and kept filling the eye as the subretinal fluid disappeared, so this gas helped revolutionize things.

Also, liquid silicone was used to inject into the eye. The disadvantage of that, of course, was that it didn't expand after you got it in. You had to put in as much as you could and that was the end of that procedure. That, also, sometimes would leak through a large retinal break and get under the retina. There was a lot of argument against the use of silicone oil. There was a great wave of acceptance and everybody was injecting silicone, and then complications became obvious and it came into disrepute. But one of the men—I think it was Mr. [Charles David] Scott in Cambridge, England—who had been a devotee of liquid silicone, kept plugging away at the advantages and pointing out that the disadvantages were not due to the silicone but were due to the operative technique. I think he's been proven right in the majority of cases.

Hughes: *What were people doing wrong in terms of the operative technique?*

Pischel: They might inject silicone first under such high pressure that it stopped the circulation to the retina, which led to partial retinal necrosis. That was one of the many complications. Also it would leak out through the hole or break in the retina and elevate the retina.

People also thought that sometimes along the track of the needle, when it was withdrawn from the eye, if you left a little silicone in the eye, that that track of bubbles of silicone oil would have a bad effect on the vitreous. The silicone just compressed the vitreous as much as it was compressible, which is not much, and filled up the rest of the fundus. So you had to provide adequate drainage so that your silicone could push the retina back into place. If somebody operated and didn't provide adequate drainage for the subretinal fluid, he would say, "Well, this is a complication of silicone oil," and it was really just a complication of the surgical technique.

Hughes: *Were there methods for measuring the pressure of the posterior chamber?*

Pischel: Yes, you could easily measure the pressure in the eyeball with a tonometer, an instrument that's used continually now for measuring the pressure of an eye ever since its development by [Hjalmar August] Schinetz of Norway.

Hughes: *Was that routinely done with these operations?*

Pischel: I don't know if it was routinely done, but it should have been routinely done so that you didn't leave too high a pressure.

Use in Various Eye Conditions

Hughes: *I understand that photocoagulation soon began to be used in the treatment of other conditions. I believe you used photocoagulation in the treatment of Eales' disease, von Hippel-Lindau disease, and Leber's miliary aneurysms?*

Pischel: Yes. Aside from trying to seal a hole in the retina, photocoagulation was used to obliterate blood vessels. All of these diseases you mentioned were where there were bad blood vessels in the eye, and by use of the machine one could convert a leaking blood vessel, let us call it, into a scar tissue that was tight, and the vessel no longer bled because it was obliterated by the scar tissue. So these diseases that you mentioned were being treated for the first time successfully. There had been attempts at diathermy treatment of these diseases, but that was very difficult because it required such accurate localization of the application of diathermy.

Hughes: *In 1967 Meyer-Schwickerath wrote one of many papers on photocoagulation, and described the use of photocoagulation in Eales' disease.* He predicted that this was one of the most important steps in the application of photocoagulation. Did that actually prove to be the case?*

Pischel: Well, it certainly is *a* very important step and a very important use of photocoagulation, which is used to the present day.

Medical Innovation

Hughes: *In 1959 you and Dr. Colyear wrote a paper entitled, "Clinical results of light coagulation therapy."** [Dr. Pischel looks over paper] The opening sentences I thought I'd quote to you:*

"The most important work presented to the ophthalmological world in the past two decades is that of the use of light coagulation for the treatment of various eye conditions as developed by Meyer-Schwickerath at the University of Bonn in Germany. As was the case with the appreciation of Gonin's work thirty years ago, it has taken several years for ophthalmologists to realize the value and scope of this method of treating certain eye disorders."

Well, we've talked about why you considered light coagulation important, but can you say something about this lag in acceptance of innovation, not just in ophthalmology but in the medical world as a whole? Gonin's work is a example where it took decades before his procedures were accepted. Why is there this lag?

Pischel: In Gonin's case, it wasn't several decades; it was about one decade.

Hughes: *All right, one decade. [laughter]*

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* G. Meyer-Schwickerath. History and development of photocoagulation. Am J Ophthalmol 1967; 63:1812-14.

** Trans Pac Coast Oto-Ophthalmol Soc 1959; 40; 63-71.

Pischel: But I think all your experience and training in medicine is that you like to have your ideas and your treatments well-founded and well-proven. When something new comes in you want to be sure, number one, that it causes no harm and, number two, that it is better than any treatment you had before. So people wait to get evidence that this new form of therapy is really good. I think what all of us in medicine learned as we went through medical school was to be sure that what you're doing is going to cause no harm and is going to be better than what was done before. So innovations are regarded with a little skepticism until they can be proven to be very good.

Hughes: *Yet somebody at some point has to take a risk and extend the technique. Would you put yourself in that category?*

Pischel: Well, somebody has to take a risk.

Now in Gonin's particular case, he was treating a disease that in the hands of everybody else was incurable. So when he probably honestly said to his first patient, "This is something we can try. Nothing else has ever cured the trouble you have," the patient would say, "Well, if nothing else can cure and this may, let us try it." So he did try, and gradually, after he began to get some success for his operation, he could assure patients that there was a reasonable chance of getting something good out of it, and a very small chance of doing any harm.

Hughes: *With photocoagulation it wasn't quite as dramatic. There were techniques for treating retinal detachment, namely diathermy. Did that change the decision-making process?*

Pischel: Of course, as with many other new techniques, the technique of photocoagulation had definite limitations that some people didn't realize or that they hadn't thought were applicable to a particular case. So they would go ahead and treat a patient with this new method, and it would have a bad result and result in the general feeling among other doctors that this type of treatment was tried and look at the bad result it had, and the decision made, we're not going to try it.

I don't know if that answers your question or not.

Hughes: *I think it does. How did you decide to try a new technique on patients? How did you judge that enough evidence was in that it was safe or at least somewhat safe to try it out on patients?*

Pischel: I think you're referring to when did we decide to try to cure retinal detachments. I have to give the credit for the courage to do that to my father who was always eager to try new things, contrary to most older physicians who did not like to try new things. So when he heard about curing retinal detachments at this international congress in 1929, he was very eager to try it when he came home. When we had a patient with retinal detachment we could tell him honestly that everything we had tried in the past had been unsuccessful. "This is a new method which has been shown to be—

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Pischel: —successful. This may work. Let's try it." And that's how we treated our first case. We treated our first cases, as I've said before, with the Gonin cautery puncture technique. If you hadn't seen it used before, you would hardly think it was something safe to try. But my father had seen it used in Vienna by Karl Lindner, so we had that advantage when we started doing it in San Francisco.

Hughes: Was there much to the postoperative treatment after photocoagulation?

Pischel: Well, postoperative treatment depended greatly on the case. If a retinal break was in attached retina, postoperative care at the beginning was that patients shouldn't use the eyes for several days. You urged them to have the binocular bandages through the day and try to keep the eye movement at a minimum, but we gradually found out that even that wasn't necessary. So the post-operative care for photocoagulation really was simple. It became an ambulatory procedure.

Hughes: But it was not in the very beginning?

Pischel: No. The first ones we tried it on, we definitely had the patient in the hospital and in bed.

Hughes: How did patients react to the procedure?

Pischel: They were often dumbfounded that it hadn't hurt more. The only pain they usually complained about was the retrobulbar injection, which is a painful procedure but only lasts a few seconds.

Potential Hazards

Hughes: Could you discuss some of the hazards associated with using photocoagulation? One problem was overheating of the eye itself.

Pischel: Yes, you could overheat the cornea if you didn't keep it moist, so that was one thing you had to worry about. Of course, if you used the wrong amount of power, set the machine at too high a power, you would create a much bigger lesion in the retina and choroid region than you needed, and that could lead to bad results, the contracting of scar tissue and atrophy of the retina from too much heat.

Hughes: Had Meyer-Schwickerath worked out all those details before the technique was available in this country?

Pischel: I think he had warned us about just about everything that might go wrong.

Hughes: Was there literature on the subject of what power should be used?

Pischel: There wasn't literature. We'd heard it from the mouth of the master himself when we visited him and watched him work. So he could tell us just what to do and what not to do.

Hughes: When Meyer-Schwickerath gave that address to the Academy in 1958, did that then prompt ophthalmologists, or at least retinal men, to try the technique?

Pischel: Yes, of course, it stimulated it very much.

Hughes: What about other possible adverse effects?

Pischel: Of course, if you weren't careful and kept your beam in the pupil, you could irritate the iris. You could irritate it enough to get a little atrophy of the iris, which was a complication that you could avoid by proper use. Too much light and heat on the cornea would also make it get hazy.

Hughes: Were you using steroids to try to clear up the cloudiness of the cornea?

Pischel: You might make the cornea get hazy right away, get cloudy right away, if you used an improper beam and focused it wrong, and if that hadn't been too damaging the cornea would clear by itself. I'm sure some cases where the cornea wasn't clearing by itself, steroids would be used. But I can't remember exactly when we started using steroids in ophthalmology. [1951]

Hughes: But that was a big breakthrough, was it not?

Pischel: Oh, yes, it was a tremendous help.

Hughes: From talking with Dr. Thygeson, I know the dark side of steroids as well. He warned about the overuse of steroids in ophthalmology. Were you aware of the debate that went on?*

Pischel: I imagine I was. At this late date, twenty years later or more, I can't remember any of the details of it. But there certainly was an overuse of steroids.

Hughes: Were you careful about prescribing steroids?

Pischel: I hope I was. [laughs]

*Hughes: In October 1960 you reported that there were at least fifty photocoagulation machines in the United States.** I suppose this was some sort of measure of the acceptance of the procedure.*

Pischel: Yes.

The Laser

Hughes: At what stage did ophthalmologists begin to turn to the laser?

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* See interviews in this series with Dr. Phillips Thygeson, conducted 1986-1987.

** D Pischel. Introduction to symposium on retinal detachment. Trans Am Acad Ophthalmol Otolaryngol 1962; 66:57-9.

Pischel: I forget when we got our first laser machine at Children's Hospital in San Francisco.* But it has certain great advantages over the xenon arc photocoagulation.

Hughes: What are some of those advantages?

Pischel: It can be focused better. It can be used through a mirror in a contact glass so you can get easily into the periphery of the retina. It usually does not require any great amount of anesthesia for the patient because the burst of the laser beam is so fast that the patient doesn't find it too annoying.

Hughes: But you did use some sort of anesthetic?

Pischel: Yes, you had to anesthetize the cornea so that you could put the contact glass on so you could focus the laser beam into the eye.

Hughes: The retrobulbar injection was no longer necessary?

Pischel: Wasn't necessary in all cases. In some cases, you had to use it anyway.

Hughes: Was novocaine still the anesthetic of choice?

Pischel: No, I think there were several other anesthetics that we used at that time, lidocaine and other ones.

Hughes: Was it an easy transition for an ophthalmologist who had been using xenon arc photocoagulation to move to the laser?

Pischel: Oh, yes, it was easy and much more comfortable. Somebody had a poll of doctors and patients, and he found that many doctors preferred the laser because they could sit quietly in front of the patient very comfortably seated while they were treating the patient, whereas with the xenon arc photocoagulator you had to stand up and lean over the patient, which was a little tiring to your back.

Patients, on the other hand, according to this survey, preferred the xenon arc photocoagulation because they were lying quietly and didn't feel anything after the initial injections, whereas with the laser they had to sit and hold their head quietly in the machine and often could experience the flash of light as a very disagreeable thing. So that survey humorously said that the doctor preferred the laser because it was comfortable, he was sitting, and the patient preferred the xenon arc because he was lying down and comfortable.

Hughes: Perhaps the patient also appreciated the fact that the doctor had such close scrutiny under photocoagulation. Weren't you very close to the patient?

Pischel: You certainly were, yes. [laughter]

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* According to Dr. Roger Atkins, a hand-held ruby laser was first used at Children's Hospital in 1958. Its focus mechanism was not as good as that of the photocoagulator and it was soon abandoned (personal communication, September 2, 1987).

Hughes: *There was no chance of wavering attention.*

Pischel: No.

Hughes: *When a new procedure came along, such as photocoagulation, was there any problem with insurance coverage?*

Pischel: No. When photocoagulation first started out, either photocoagulation with the xenon arc or laser photocoagulation, the climate as far as malpractice suits was concerned was quite different. It's only in the last decade, shall we say, that malpractice insurance has become of such great importance because so many cases have resulted in tremendous amounts of money being awarded patients for insignificant difficulties.

Hughes: *That's an interesting point you bring up, but what I was really meaning by insurance was not the physician's insurance but the patient's insurance. Was there any problem with patients getting health insurance coverage for a new procedure such as photocoagulation?*

Pischel: I don't remember that we had any trouble about that. Knowing now how the bureaucratic mind works, we probably did have some difficulties persuading them that this was a procedure worth some recompense. But I can't remember any details about it. Thank heaven I got out of practice before all these questions came up.

Cryotherapy

Hughes: *Did you ever use cryotherapy?*

Pischel: Yes, we used cryotherapy. I can't tell you when we used it or how much we used it, but it has a very definite place and big advantages. Harvey Lincoff has pointed out so well the advantages of cryotherapy over diathermy or even over photocoagulation.

Hughes: *Can you tell me what some of those are?*

Pischel: It originally, I believe, was used in place of diathermy, and the big advantage claimed for it was that it did not harm the sclera at all. That isn't a hundred percent accurate because it does make changes in the sclera which are apparent when you reoperate a case, but there wasn't the scleral necrosis that you could obviously see as the little black spot which results from the use of diathermy.

Cryotherapy, also: The reaction inside the eye was more widespread so that you did not have to make so many applications. One application would cover an area bigger than the usual small lesion the diathermy procedure produced. So it was easier to cover large areas in the retina with fewer applications.

Hughes: *How was the cold produced?*

Pischel: You had carbon dioxide snow and that was packed into a hollow tube. Then some of the snow was protruded from the end of it, and you touched that up against the sclera. That's the way it started.

Hughes: That was a technique which developed after diathermy was in use?

Pischel: Oh, yes, long after diathermy was in use. I've forgotten when Harvey Lincoff first proposed it. I think [Giambattista] Bietti in Italy way back in the late twenties or early thirties used cryocoagulation, but he didn't follow it up as a regular thing and expound its advantages and so on, so that he hasn't been given credit for proposing it because he didn't follow it up enough.* It was only, I think, quite a number of years after he had first used it that Lincoff popularized it, and then Bietti was able to say or, if not Bietti himself, his followers were able to say that Dr. Bietti used this first.

Hughes: The follow-up is important in medicine.

Pischel: Yes, the follow-up's very important.

Hughes: Is there anything more you'd like to say about photocoagulation?

Pischel: I don't think so. That letter of Meyer-Schwickerath covers it so well.**

Discussion of Specific Pischel Papers

Lattice Degeneration

*Hughes: Then I have a question about a paper that you wrote in 1966 with Harold Lemcke on lattice degeneration of the retina.*** Do you recall the paper?*

Pischel: Well, since you gave it to me I recall it. [laughter]

Hughes: Under what circumstances would you treat lattice degeneration?

Pischel: There you've come to the very personal opinion of every individual doctor. Some people are more aggressive and some people are less aggressive. We unfortunately don't know or, at least while I was still in practice, we did not know exactly which case of lattice degeneration would go on to produce serious difficulties in the eye. It was soon obvious that every case of lattice degeneration did not have to be treated.

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* Duke-Elder and Dobree credit Deutschmann (1933) with introducing carbon dioxide snow, and Bietti (1933-34) with introducing a mixture of carbon dioxide snow and acetone. Lincoff and his associates subsequently developed (1964-66) "more effective methods." (Diseases of the Retina, 819.)

** G Meyer-Schwickerath. History and development of photocoagulation. Am J Ophthalmol 1967; 63:1812-14.

*** D Pischel, HH Lemcke. The time interval in the development of lattice degeneration of the retina. Am J Ophthalmol 1966; 61:1216-21.

I think in the paper we pointed out some of the indications. Certainly if a patient had developed a retinal detachment or a retinal break from lattice degeneration, or had areas of lattice degeneration in one eye, and one saw lattice degeneration in the other eye, one would be strongly moved to treat the second eye. And I believe correctly, because if one eye develops a retinal detachment, the chance of the other eye developing one is fairly high, whereas the proper use of photocoagulation or cryocoagulation in the treatment of lattice degeneration has very few complications. I stress again, the *proper* use of photocoagulation or cryocoagulation has very few complications.

Hughes: *Where would you place yourself in this scale of aggressiveness?*

Pischel: Well, that's like asking a football player how good he is. [laughs] I thought I was a very conservative gentleman but some people thought I was very radical.

Dr. Pischel, date unknown

Miotics

Hughes: *In 1966 you published a paper on retinal detachment after the use of miotics.* You postulated a causal relationship, but somewhat hesitantly, I thought. Did you do further studies? Did you become firmly—?*

Pischel: I don't even remember that I wrote a paper about that.

Hughes: *[laughing] Well, you did.*

* D Pischel, HH Lemcke. Retinal detachments after the use of phospholine iodide. Trans Pac Coast Oto-Ophthalmol Soc 1966; 47:157-63.

Pischel: I can remember that there was considerable thought or discussion at the time that causing the spasm of the ciliary body caused traction on the most anterior portion of the retina, and if the retina were in somewhat friable condition that traction could occasionally produce a tear.

Hughes: Did you ever think that this was happening in some of your patients?

Pischel: I'm sure I thought this might happen to some of my patients and I was worried about the use of miotics. But miotics are sometimes necessary. You have to choose what risk you're going to take.

The miotic is used in glaucoma to reduce the pressure. If you don't use the miotic, the pressure gets up into dangerous heights and destroys the retinal fibers as they come off the disc, causing a big excavation of the optic nerve head. If you do use the miotic and bring the pressure down, then you do have this added traction on the anterior part of the retina. So you have to balance again those risks and see which is the lesser of the two evils.

Sclera Transplantation

*Hughes: Another paper the following year, 1967, was on scleral transplantation in the treatment of retinal detachment.**

Pischel: Scleral re-inforcement?

Hughes: Well, in this case I believe you called it scleral transplantation, but perhaps it's the same thing. You were using strips of sclera from eyes that you'd gotten from an eye bank, and my understanding is that you were doing buckling operations with sclera.

Pischel: With the use of sclera, yes.

Hughes: Did you develop this idea?

Pischel: I'm sure I did not develop that idea. I wouldn't want to take credit. I don't know who had the original idea. But I do remember, now that you mention it, that at one time we were using sclera to buckle the eye, instead of using a silicone or a plastic band. I shouldn't say silicone but some form of plastic band to buckle in the sclera. We could use donor sclera. And on the theory that corneal transplants found a good host in the recipient eye, we found that the sclera was a good host for donor sclera in the recipient's eye.

Hughes: Was sclera superseded by other material?

Pischel: I think it was superseded by other materials because the other materials were easier to get.

Hughes: Is it true today that not everything in a donated eye is utilized?

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* D Pischel. The use of sclera transplants in the treatment of retinal detachment. Trans Pac Coast Oto-Ophthalmol Soc 1967; 48: 9-12.

Pischel: Well, I think the sclera is being utilized very little nowadays, but the cornea, which was the original donated portion, is very valuable. Some people are strong advocates of using donor vitreous as an implant.

Hughes: Did you ever use donor vitreous?

Pischel: Yes, I used donor vitreous. I think Don Shafer in New York was the great proponent of donor vitreous.

Hughes: What is the advantage of donor vitreous?

Pischel: It has the same consistency as the vitreous that is already in the eye, and it doesn't stir up any allergic reaction. You could use it to inject and force the retina back into place the way silicone oil or air can be used to force the retina back into place. It has the advantage over air that it doesn't get absorbed quickly.

Hughes: In this same paper you referred to "full thickness" scleral resection and also "lamellar scleral resection." What is the significance of those two terms?

Pischel: A lamellar scleral resection means cutting out part of the scleral thickness and leaving a thin lamella of the original sclera behind, whereas in full thickness you cut through all of the sclera. The lamellar scleral resection—and I think, Shapland of England was a great proponent of it and deserves credit for popularizing it—was much safer because you didn't have an area of bare choroid exposed that could easily rupture with devastating extrusion of the contents of the eyeball. It had, I also think, a very big advantage in that it produced a small buckle on the inside of the eye, so it was like implanting something to make a buckle when you did a lamellar sclera resection.*

Hughes: Was there any particular journal that you preferred over others in terms of publishing your own papers?

Pischel: No, I don't think so. I think it's very much a personal choice. You knew the editor personally, and you might have discussed something with him, and the editor might have said, "Well, that's a good thing. Why don't you send us in a paper on that?" You would send it to one journal, and discuss something else with the editors of the other journals, and a paper would go to another one.

You embarrass me by quoting all these papers I've forgotten that I wrote. I didn't realize I was so verbose. I wrote too many papers.

Hughes: I'm worried about the papers that don't even appear in your bibliography. I came across yet another one today in a paper by Dr. Bettman.

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* For better continuity, the discussion of trachoma which follows on the tapes was incorporated in the earlier section of the transcript on the Viennese eye clinics.

Retinal Detachment, 1933

Hughes: *This was a paper that you published in 1933.* I have been looking for the paper in which you reported the first eighteen cases you treated by Gonin's technique. Do you think that was the paper?*

Pischel: I don't think that was eighteen cases treated by Gonin's technique. I don't think we treated eighteen cases with the actual cautery puncture. I think it was eighteen cases treated with diathermy.

I'm pretty sure '33 was the time when we had started to use diathermy. I was just back from the trip to Europe where I had seen diathermy being used, and so I was reporting the cases. That's what helped start the ball rolling.

Hughes: *Do you think it was that paper that started the ball rolling in this country?*

Pischel: I don't know if it started the ball rolling in this country, but it certainly started the ball rolling on the Pacific Coast because people up and down the coast knew there was one man who knew how to cure retinal detachments.

Hughes: *And they came flocking?*

Pischel: Well, I won't say they came flocking, but they were very kind, and careful with their patients, and sent some cases down to me to treat.

Hughes: *Did you have visitors in the operating room?*

Pischel: Oh, sure, we had visitors. I never kept people away from watching me operate, but I can't tell you when we had the first visitors who decided it was time to look and see what was happening in the treatment of retinal detachment. [brief interruption]

* D Pischel. Present status of retinal detachment operations. Trans Pac Coast Oto-Ophthalmol Soc 1933; 114-38.

IV. MISCELLANEOUS TOPICS

The Division of Ophthalmology, Stanford Medical School, San Francisco

Hughes: *Dr. Pischel, in 1959 Stanford Medical School moved to Palo Alto. You had recently stepped down as chairman of the department of ophthalmology.*

Pischel: Yes, I have to say it was not a department; it was a division. It was a division of the department of surgery. I was upbraided by some of my colleagues for not insisting I wouldn't take it over unless it was made a department.

Stanford brought Ed Maumenee out from Baltimore—I've forgotten what year Ed arrived [1947]—fresh out of a five- or maybe six-year residency at Johns Hopkins at the Wilmer Institute. He was the head at Stanford. Ed made tremendous changes in the "department," all for the good. Well, it was really a department even if it was only technically called a division.

Maybe you don't know what the difference between a department and a division is, and I didn't know what the difference was either except you didn't have your own secretary if you were only a division. You had to share secretaries and so on. But Ed really built up the division of ophthalmology at Stanford. Then he was called back to head up Johns Hopkins-Wilmer Institute. For want of somebody else, they appointed me as chief of ophthalmology.

Hughes: *You became head of the division of ophthalmology at Stanford University School of Medicine in 1955 and you remained until 1958.*

Pischel: Yes.

Hughes: *What happened during that transitional period when the medical school moved to Palo Alto.*

Pischel: They had a peculiar idea at that time: They didn't want to have definite, separate departments of surgery and medicine and so on. The people who helped engineer this move to the Palo Alto campus, who were on the staff in San Francisco but were mostly full-timers who were not really very active in the practice of medicine as the rest of us were, thought there was no need for a separate department or division of ophthalmology down there.

A patient would come in to the outpatient clinic in Palo Alto and he'd say he couldn't see well. Well, he'd be sent over to where the eye doctors were working to have his eye examined. So there wasn't any strict division at the beginning down there the first few years.

When the medical school moved down to Stanford I only had a few years of tenure left. After all, in 1960 I became sixty-five and so that was the end of my tenure there. So then as the medical school matured down there, they realized some of their dreams were not the correct ones, and it was organized along the way it is organized now and has become a great institution, especially for training research people.

Hughes: Why weren't you interested in pursuing the question of making the division into a department?

Pischel: Well, it seemed to me in the years I'd been connected to Stanford in San Francisco on Clay and Sacramento that everything rolled along without any great turmoil. We got things we wanted and things were done the way we wanted them to be. The faculty was much smaller and much more cohesive and we all knew each other.

For instance, one of the things that Ed Maumenee put across when he came out, as I remember and I may be wrong about this, is we took over a building the medical school had down on Webster Street alongside the present library—which was at that time called Lane Library but is now called Medical Sciences Library. They remade the first floor according to what Ed wanted where you could have a laboratory for ophthalmology, which we hadn't had before. I think this was at the enormous expense of four or five thousand dollars, which we thought in those days was something. To spend that much money getting quarters fixed up for you was really almost unheard of. Now, of course, four or five thousand dollars doesn't pay a janitor's monthly salary.

Hughes: What was to take place in that laboratory?

Pischel: Ed Maumenee was very interested, as he always was up to the end and is still, in the pathology of eyes, and enucleated eyes were sent there and examined. Also, some experimental work was done under Ed's supervision. As I say, he really built up the "department" so that, when I took over for the few years I had it, it just coasted along on what Ed had done until it was moved down to Palo Alto.

Hughes: Now when you say built up, are you thinking mainly of numbers of people?

Pischel: Not only numbers of people but of what the people were doing there.

Hughes: *Is one of those things, adding research?*

Pischel: Yes.

Hughes: *Stanford, previously, had been predominantly a clinical division?*

Pischel: That's right. We'd been healers of the sick.

Hughes: *There's nothing wrong with that.*

Pischel: There's nothing wrong with that, and the medical school in San Francisco turned out healers of the sick. They now down in Palo Alto also have healers of the sick, but the emphasis is on research. You can see what is done in the way of cardiac surgery, for instance.

The Stanford Medical School Move to Palo Alto, 1959

Hughes: *Was one of the reasons for the move to associate the medical school with the basic science departments and, therefore, encourage research?*

Pischel: I don't know why [Wallace] Sterling was so imbued with the idea of getting the medical school down there. Certainly for the first ten or twenty years that it was down there, it seemed like a tragic mistake, but it's been built up into one of the big medical schools of the country now. So we have to say that Wally Sterling saw the future better than those of us who were isolated up in San Francisco.

Hughes: *How much of the ophthalmology faculty went to Palo Alto?*

Pischel: Oh, practically nobody! We already had men coming up from Palo Alto, who had graduated either from Stanford or had been taking their residency there or something like that, who came up regularly to San Francisco. Milton Flocks, Ralph Tanner, Paul Reinhardt were some of them. They used to come up to work in the outpatient clinic certain days in the week. They would help supervise the residents certain months of the year.

So when the school moved down there and they decided they didn't really need a division of ophthalmology as we had known it, the men down at Palo Alto were well able to take care of it. It was only in the succeeding years—for instance, when Dr. Dellaporta was brought in to head up the "department"—that it branched out and became such an amazing unit. [brief interruption]

When Dr. Dellaporta headed up ophthalmology at Stanford—I've forgotten the exact years [1967-1972]—he helped to build it into a good division, and it's been building up ever since. I frankly don't know if it's a department or a division today.* I've lost such touch with it in the twenty-odd years since I retired.

* In 1988, the division achieved departmental status.

Hughes: *How disruptive was the move of the medical school to Stanford?*

Pischel: Well, it was disruptive of a lot of ties. The overwhelming majority of people on the faculty stayed in San Francisco. After all, almost all of them, especially the senior men, were supporting themselves by the practice of medicine, and were donating the time that it took to run whatever they were doing for the medical school. In my case, where I knew I only had two more years on the staff, it would have been foolish for me to give up my big practice in San Francisco to move to Palo Alto.

Hughes: *So that was never even a consideration?*

Pischel: Yes, especially as they had some people down there who were eager to take over.

Some of the surgeons and medical men did go down with the school, but a big percentage stayed on in San Francisco, doing what they had done. After all, we who were on the faculty of the medical school were called clinical assistant, clinical professor, clinical associate professor—compared to somebody who was called a professor. For instance, the head of the department of medicine when I was a student was Dr. Albion Hewlett, the father of one of the founders of Hewlett-Packard. Dr. Hewlett was called a professor because he was full-time, on the tremendous salary of something like eight or ten thousand dollars a year.

I remember when I first became assistant professor, I received twenty-five dollars a year. Then that was cut to a dollar a year on the technicality that you had to have a salary to be covered by insurance. Then it was found that the paperwork involved in keeping people on the dollar a year was too much, so we served for nothing instead of the dollar a year. So our interest in teaching was because we liked to teach. Stanford had become a school that produced healers of the sick because it was staffed by healers of the sick, and they produced more healers of the sick. Nothing to be ashamed of, no.

Hughes: *Do you think there's more research interest in medicine today?*

Pischel: There are more people who are interested in the laboratory or the theoretical part of medicine than there were then. And there is the wherewithal to pay these people. As you can see, we didn't strain the budget of the medical school, although at the time the people down on the Farm [Stanford University in Palo Alto] resented the amount of money that was being poured into running the medical school in San Francisco. It was a surprisingly high percentage of all Stanford expenses. It was often brought to our attention that, "We are supporting you up there running the school, whereas down here we haven't got any money to do this, that, and the other thing."

Hughes: *Stanford Hospital in San Francisco was in terrible physical condition, was it not?*

Pischel: Oh, I don't think Stanford Hospital was so bad physically. After all, my three children were born there and they survived. [laughter]

Hughes: *Very soon after the move there was talk about raising money to build a new hospital.*

Pischel: Stanford Hospital was supposed to be very modern when it was built about 1915. It was built to supplant the old Lane Hospital which was the old brick building down on the corner of Clay and Webster Streets. For its day, Stanford Hospital was considered pretty fancy. But then twenty, thirty years later things had changed, and they needed more laboratory space and they needed more of this and that. They have succeeded in building a new hospital there, [Pacific] Presbyterian Hospital.

Hughes: *When Stanford pulled out, what happened to the equipment?*

Pischel: They took as much as was mobile with them. [brief interruption]

When the school moved down to Palo Alto, they took as much equipment with them as was feasible. Everything moveable, certainly, was taken down, and that left the San Francisco clinic, if it was to continue running, a very bareboned clinic. Jenkel-Davidson came to the rescue, as I remember, and supplied us with a couple of slit lamps and other minor equipment. After all, to take care of patients in 1960, you were not so dependent upon fancy instruments as you are today. You were dependent upon brains rather than possessions. So the men who elected to stay with it did very well in making the clinic survive and gradually building up its facilities until today, of course, it is a very well equipped place at the Pacific Presbyterian Medical Center, a branch of the University of the Pacific.

Hughes: *Dr. Bettman spoke of bumming equipment.* Was he meaning from institutions such as Jenkel-Davidson?*

Pischel: Yes, getting them to support the clinic.

Hughes: *Were there others as well?*

Pischel: Oh, yes. I think Trainer-Parsons was another big optical company that did a lot of work. These people supplied our patients and our private practice with their glasses, so they were eager to keep on good terms with us. So they were willing to help supply some of the equipment necessary. Don't forget, we're talking about hundreds of dollars of equipment and not tens of thousands of dollars of equipment as it is today.

Hughes: *Still, the situation must have been demoralizing.*

Pischel: It was, but I felt I had to abstain from active participation as I was still theoretically professor at Stanford until 1960. I had abstained from taking charge and I think we—that is, it was by consensus of all of those who had stayed behind in San Francisco from the medical school—put Jerry Bettman in charge of the clinic.

* Conversation with the interviewer, January 7, 1987, Woodside, California.

As these people were all remnants of a group that had been interested in teaching, they stayed interested in teaching. So they were willing to put up with the handicaps that came with the existence that a teaching institution had in those days. Well, that's about all there is to say. The men just liked to teach and they felt a loyalty tied to the building. The institution was gone; it was no longer Stanford Hospital. The group that took it over—I don't know if it was then a part of University of Pacific or not—had to agree when they took over these facilities that they would be used for medical education.

So this group of people—for instance, Frank Gerbode, who was certainly an outstanding product of those days*—was interested in continuing the tradition of teaching at Clay and Webster Streets. After all, if you've been connected with an institution for ten, fifteen, twenty years, it gets into your blood. That's how the institution survived and revived and became the present Pacific Presbyterian Medical Center.

Hughes: *Were there harsh feelings between the San Francisco group and the group that was in Palo Alto?*

Pischel: It wasn't all harmony, shall we say, as a delicate way of putting it. It wasn't all harmony because the group down there had to struggle to keep going and keep patients coming and so on. One of the arguments about moving the school to Palo Alto had been that the trend of population was to increase down the peninsula. But the thing they forgot was that the trend of the well-to-do population was to move down the peninsula whereas the trend of the clinic population stayed in San Francisco. So it was quite a while before they built up a decent clinical practice down there.

Hughes: *Dr. Bettman also mentioned some controversy over sources of private funding or donations, I think he was referring to.** Stanford in Palo Alto was trying to prevent you in San Francisco from fishing in the same donor pond, so to speak.*

Pischel: Well, as I say, I was not active in this thing then because I was sort of a hybrid professor of a medical school that had moved out from under me. So I wasn't in on the inner workings of it. I actually abstained from putting my oar in there because I felt it was not appropriate and that Jerry Bettman should be the guy who ran the show.

In those days, I took my patients out to Children's Hospital. That's when I started my affiliation with Children's so that I wouldn't be interfering with the bed numbers and with the administration on Clay and Webster after I had passed out of the picture.

Hughes: *So you hadn't been practicing at Children's prior to that?*

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* For a discussion of the problems created by Stanford Medical School's move to Palo Alto, and the subsequent development of what today is known as Pacific Presbyterian Medical Center, see *Frank Leven Albert Gerbode: Pioneer Cardiovascular Surgeon,* an oral history interview conducted 1983-1984 by Sally Smith Hughes, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1985.

** Conversation with interviewer, January 7, 1987.

Pischel: No. We had occasionally taken patients out there, patients who wanted to be at Children's Hospital.

Hughes: *What did you feel about administrative work?*

Pischel: I think I was the world's champion as the poorest administrator ever developed. Administrative work was not down amongst the things that I could do.

Hughes: *Yet you did accept positions in practically every well known American ophthalmological society known to man, and that must have involved some administration?*

Pischel: But that's different than the necessity of running something from day to day. When I was president of the American Ophthalmological Society [1971], the secretary of that society, Maynard Wheeler, carried the big load and it was not a very big society. When I was president of the American Academy of Ophthalmology and Otolaryngology [1960], the secretary, Dr. William Benedict, I think had a staff of two secretaries working under him.

Now, if you think of the president of the American Academy, he is head of an institution that probably has twenty or thirty full-time people working there in their headquarters on Beach Street in San Francisco. So everything has changed, and the administration is one of the big bugbears. Administration is so difficult that Bruce Spivey, who helped build up Presbyterian Medical Center and helped build up the eye clinic, has decided he has to retire from the teaching part of it to help run the American Academy.

Hughes: *Does this list of residents that Dr. Bettman compiled look complete to you?**

Pischel: I can't think of any gaps. I'm amazed at how well our residents have done. There is nobody on that list, except perhaps one, about whom we have to be ashamed. We turned out good healers of the sick. Many of them, besides being healers of the sick, were also good teachers. One of our early residents, who lives right up on the hill behind us here, Ernie Denicke, still is active.

Membership and Offices in Medical Societies

[Interview 5: February 10, 1987]##

San Francisco Medical Society

Pischel: In regard to the societies of which I've been a member and in which I had the privilege of being an officer: The first one was merely being chairman of the section on ophthalmology and ear, nose and throat in the San Francisco Medical Society. I got that because the outgoing chairman was mad at the man who was supposed to follow him, and so he nominated me quickly. That's how I got my first chairmanship. Hardly anything to be proud of.

* This list is on file at The Foundation of the American Academy of Ophthalmology, San Francisco.

Hughes: *That was in 1930.*

Pischel: Yes, I'd only been home from Europe a few years.

Hughes: *Wasn't that unusual to have such a young man as chairman?*

Pischel: Yes. As I say, the reason I got it was because of a feud between two older men, not because of anything I had done by that time.

Hughes: *Is there anything to be said about that position?*

Pischel: In those days it was an eye, ear, nose and throat section of the San Francisco Society. So I had to sit through the sessions that were all nose and throat because, by that time, they'd divided the meeting so that one evening it would be ophthalmology and another evening would be ear, nose and throat. So while there was no clear definition of the specialties in medical practice, we made a definition there in the medical society.

Hughes: *You were probably the only ophthalmologist attending the ear, nose and throat?*

Pischel: Well, practically. I was the only pure ophthalmologist. There were a number of men still doing eye, ear, nose and throat when I started out.

Hughes: *Was there talk, even in those early days, of separating the specialties?*

Pischel: I'm sure there had been some talk because in Europe the specialties had been separated, and there were departments of ophthalmology and departments of otorhinolaryngology all over the European continent. So we were just following in their footsteps when we finally did that here in America.

California Medical Association

Pischel: [consulting his curriculum vitae] I notice here on the list that the next chairman I had an opportunity of being was chairman of the section on ophthalmology of the California Medical Association. That was in 1946, shortly after the war. The medical society then had divided these sections so we only had ophthalmology in our group. I don't think there was anything very outstanding to be said about the meetings at that time.

American Academy of Ophthalmology and Otolaryngology

Pischel: Then there was a year in 1960 where my friends had succeeded in making me president of the American Academy of Ophthalmology and Otolaryngology, as it still was in those days.* My friends on the Pacific Coast had put me in as president of the Oto-Ophthalmological Society. So I was wearing two hats that year.

Hughes: *What did that do to your practice of medicine?*

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* In 1978 the two specialties within the Academy separated, first into divisions, and then into independent societies—the American Academy of Ophthalmology and the American Academy of Otolaryngology.

Pischel: I should ask my personal secretary what it did. [laughs] As a matter of fact, when you're a chairman or a president you don't really do anything. It all depends upon the secretary of the society. As we had Bill Benedict as the efficient secretary in the American Academy, I didn't have any work to do there. All I had to do was what he told me to do. I'm embarrassed; I don't remember who was the secretary of the Pacific Coast Society, but he was equally efficient, so that I had an easy time at that.

Hughes: What were the responsibilities of the president?

Pischel: All you had to do was to appear on time and look as if you were halfway intelligent and sit up at the desk and try to stop people from talking too much.

Hughes: Was it assumed that you would lead the commentary?

Pischel: No, you would recognize the various speakers, and you tried to call on somebody in the audience to add comments to what had been said. Very often you had to pound your gavel to stop somebody who was talking much too long.

Hughes: Did the president have anything to do with accepting or rejecting papers?

Pischel: No. Fortunately, there was a secretary for publications. In my days in the Academy, that was Bill Benedict. He and the editor of the Academy transactions would go through that.

American Medical Association

Pischel: I forgot to mention, I was also chairman of the Section of Ophthalmology of the American Medical Association, which, by that time, 1958, had divided into eye, and ear, nose and throat. There again, as I say, all you did was what the secretary of the section told you to do. Really the most difficult thing was to shut people up who talked too long, because you wanted the meeting to roll along so that people weren't bored by useless discussions.

Pacific Coast Oto-Ophthalmological Society

Hughes: Could you say something about the origin of the Pacific Coast Society?

Pischel: Well, the Pacific Coast Society was due to be born on April 18, 1906. They were a small group of eye doctors and ear, nose and throaters in San Francisco who were rudely awakened by the earthquake, so there was no meeting.

The reason for the society in those days was that if you wanted to go to a national meeting, most of which were held east of the Adirondacks, it took you three days to get to Chicago; it took you another day to get to New York, so there you had eight days coming and going. Then, if the meeting lasted five days, you had almost two weeks out of your office.

Whereas on the Pacific Coast, even in the days of trains before there were any planes, overnight you could get to anywhere on the Pacific Coast. So many men came to the Pacific Coast meetings and would gather some information that had been broadcast to them by somebody who had been back to a

meeting on the East Coast. So it was a very useful and a very friendly society, which it still is. We know each other very well, and the ear, nose and throat people will deign to speak to the ophthalmologists, and vice versa. So the Pacific Coast is a very friendly society and it served a very useful purpose then, and still does.

Hughes: *Does the friendliness imply that there never has been a question of separating the two specialties?*

Pischel: Not in the Pacific Coast Society. It's too small and we know each other so well we don't have to separate it. The programs are entirely separate. There's an opening meeting in which somebody speaks on a broad medical subject, and that's the only time we meet together except for the banquet.

Northwestern Medical Association

Pischel: [continuing to consult his curriculum vitae] Now, you have down the Northwestern Medical Association. I perhaps shouldn't say in publication that the chief enjoyment of the Northwestern Medical Association was the skiing that we did before the meeting. We skied in the morning and in the early afternoon and then met at approximately three o'clock. Then we had a meeting for three or four hours until six or seven o'clock, which was as long as many other meetings would go which only run half time.

Hughes: *Do you know the impetus for the formation of that society?*

Pischel: The impetus for that society was the good skiers, of which my cousin-by-marriage, Harry Garland, was one of the outstanding ones. Merle Taylor of Portland, who was a great skier, also was very interested, and Vernon Smith from St. Paul, who probably was the best skier of all. Those three helped organize this society.

Hughes: *You're using a broad definition of northwest if you're pulling in somebody from St. Paul.*

Pischel: Well, the meeting of the Northwestern Medical Association happened to be held in Sun Valley, Idaho. That was one of the earliest ski centers in the United States. The center was organized for skiing by the Union Pacific Railroad administration to stimulate people coming there. They used to run special trains all the way from Chicago.

Hughes: *So you pulled midwesterners to that meeting?*

Pischel: Yes. Oh, we pulled people from the East Coast who were smart enough to realize how good the skiing was at Sun Valley.

Pan-Pacific Surgical Association

Pischel: The Pan-Pacific Surgical Association doesn't need any description; everybody knows about it. It was organized in Honolulu by Forrest Pinkerton. He was the organizer and executive secretary, or whatever you want, for years until much more recently. I've forgotten when he stepped down. But he's the man

who really organized the society. People on the mainland of the United States loved to go there because they hold it in January, and they get away from the snow, those who don't ski. Gradually there are more and more people coming up from down under—the Australians are coming, the New Zealanders are coming. The Japanese are also coming. So it's quite a good international society.

Hughes: *What about the calibre of papers?*

Pischel: I'm sure that one of the New York men who never misses a meeting in Honolulu would maintain that the papers are of a very high quality, so we'll let it go at that. We'd better cut that out of the printed version. [laughing]

Pan American Association of Ophthalmology

Pischel: Benjamin F. Boyd, from Panama, was the guiding spirit of the Pan American Association of Ophthalmology for many, many years. It is a society that brings together people from the southern hemisphere and Central America and from the United States. I think it's a very good society. I've attended many of the meetings and enjoyed them and learned something there.

Hughes: *Is that the end of the list?*

Pischel: Oh, you have some other things down here.

International Council of Ophthalmology

Pischel: I was a member of the French Ophthalmological Society, Societé Française d'Ophtalmologie, because I was on the International Council of Ophthalmology, so they took us in. I was vice-president of that. I was on it for eight years, thanks to Jack Dunnington in New York, who put me on it.

But that is a peculiar council that doesn't organize a meeting but oversees a meeting that a committee, almost a self-appointed committee, organizes, and then we have the big international meetings. The council sort of is the guiding genius of it but doesn't have much to do with it. For instance, in the Mexican meeting, the Mexican committee ran the meeting, picked the papers and so on, and arranged for all the entertainment which, in Mexico, was on a very high calibre.

Hughes: *Is there usually a particular topic at these meetings?*

Pischel: Some meetings are devoted to an announced topic ahead of time, but usually there are a lot of extra meetings, also.

Retina Society of America

Pischel: I was made an honorary member of the Retina Society of America because I was over sixty so I couldn't be a regular member, so there's nothing to say about that. That was organized by Charles Schepens of Boston, who is a very determined man and when he wants to do something, he does it well. So the Retina Society is a good society because of Charles Schepens.

The Gonin Club

Pischel: The Gonin Club was organized by Professor Gerd Meyer-Schwickerath, who was the man who started photocoagulation. He thought it would be a good idea to honor Gonin permanently. I was in on the beginning of that because I knew Gerd Meyer-Schwickerath, and so I can't claim any glory for having been a member of the Gonin Club except I was old enough at the time to be in on it.

The New Zealand and Australian Ophthalmological Societies

Pischel: Then you have down here the New Zealand Ophthalmological Society and the Australian Ophthalmological Society. I went down as a guest speaker to both those societies—on the same trip, fortunately—and that's why I'm an honorary member.

Hughes: Say something, if you please, about the Gonin Medal, which I understand is the most prestigious in ophthalmology. Am I correct?

Pischel: It's a great honor to be given the Gonin Medal by the Gonin Club. It has to do with somebody who has done something in the way of retinal detachment or retina work. It's a very small club. Our last meeting was up in Copenhagen this last summer [1986]. I guess there were about 120 members there.

American Ophthalmological Society

Hughes: You are also a member of the American Ophthalmological Society which, in itself, is an honor. Do you remember when you were elected?

Pischel: Yes, I was elected in 1944. During the war they didn't have many people staying home that they could elect, so they had to elect me.

Hughes: [laughs] I'm sure there was a little bit more to it than that.

The Howe Medal

Hughes: In 1966, you received the Howe Medal from the American Ophthalmological Society. Was that for a specific piece of work?

Pischel: By 1966, I had done a lot of work in retinal detachment because I had been able to travel abroad and see what other people were doing and then bring home the knowledge that had been developed overseas. [brief interruption]

For instance, in the early 1930s I went abroad on an extensive trip, which was all due to the fact that my father was still active in practice and could hold down the office practice while I was away. That was when I first met Gonin and was able to visit him in his home office. On that same trip I went to Vienna. Safar had just developed his penetrating pins, using diathermy instead of the galvanocautery, the red-hot cautery that Gonin was using. He had visited Weve and a man up in Stockholm, Larsson, who didn't follow up with interest in retinal detachment but at the time had developed diathermy as a means of doing certain coagulations of vessels around the eye. Safar was

smart enough to figure that you could use that for stirring up the exudate in a retinal detachment operation. I told you how he figured out to put the pins in and not lose any subretinal fluid.

Hughes: *The beer keg story?**

Pischel: Yes, how you make holes in a keg of beer without losing the beer. You lose the beer when you pull the nails out, so you lose subretinal fluid when you pull the perforating pins out.

I had also visited Weve who was using diathermy in a more direct, vigorous way than Safar. So when I came home, I was able to talk about how you could treat retinal detachment.

Hughes: *Would you explain in more detail what you mean when you say that Weve was using diathermy in a more direct fashion?*

Pischel: He was using a single electrode and making applications transclerally, and then finally perforating three or four times. As soon as he perforated, of course, the eye became soft and all subsequent perforations were difficult to make. That was the big advantage of Safar's idea of leaving the pins in place, that you could do all your diathermy with the retina well-elevated and out of the way. So he deserves a lot of credit for that.

Hughes: *It was your accumulation of this experience that led to the Howe Medal?*

Pischel: Because of this experience, I did a lot of detachment work. When I started out, there was nobody else on the Pacific Coast doing it except for Cliff Walker down in Los Angeles—Cliff Walker, who trained under Cushing as a neurosurgeon, but switched to ophthalmology. He was very mechanically inclined and developed the Walker diathermy unit which was used all over the country by those of us who were using diathermy for retinal detachment work. So I had a chance to do a lot of operating in the early days before other people were operating, and that's why they gave me the Howe Medal.

Hughes: *Was Walker competitive, in terms of the number of patients that he had treated for retinal detachment?*

Pischel: Oh, yes, Walker saw a lot of patients. As one of the Irvines [Alexander Ray Irvine, Sr.] in Los Angeles said, "We keep him so busy sending him retinal detachment patients, he can't compete with us in general ophthalmology." [laughs] So that was one way of keeping him busy.

Hughes: *You were the one that had the first extensive series of retinal detachment results on the West Coast, were you not?*

Pischel: Well, I, chronologically perhaps, was a little ahead of Cliff Walker, but he was really a giant in his own right.

Hughes: *Was there ever any sense of competition between the two of you?*

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* See page 52.

Pischel: Merely that he thought I talked too much and I thought he talked too much.

American Ophthalmological Society (continued)

Hughes: *Well, getting back to the American Ophthalmological Society, I understand that membership requires a thesis. Do you remember what you wrote on?*

Pischel: Yes, I wrote about the comparison of different electrodes on the eyeball, the different types of electrodes being used for retinal detachment work, and the damage they did to the sclera.

Hughes: *What year was that?*

Pischel: It must have been '43 or '44 because that's the year I think I was asked to join the society.

Hughes: *If one were nominated to that society, was it understood that you would be actually invited to join?*

Pischel: No, you had to submit a thesis subject to acceptance by a committee of the society.

Hughes: *That wasn't just pro forma?*

Pischel: No. The thesis committee, I think, prided itself on turning down a lot of theses.

Hughes: *So that really was a hurdle?*

Pischel: Yes, it was a hurdle to get over but, as I say, it was during the war and nobody else was trying to get in so that's why I was admitted.

So I had a chance to do a lot of operating in the early days before other people were operating, and that's why they gave me the Howe Medal.

Hughes: *Do you remember who was on that committee?*

Pischel: No.

Hughes: *Were you ever a member of the American Board of Ophthalmology?*

Pischel: No, I never was on the board. That takes somebody with organizing abilities.

Hughes: *You don't consider that your forte?*

Pischel: I'm the most disorganized man you've ever met.

Hughes: *In your presidential address to the Academy in 1961,* you mentioned that the Board of Ophthalmology certifies its members for life to ensure continued competency. You suggested following the practice of the American Academy of*

* Some problems facing the Academy. Trans Am Acad Ophthalmol Otolaryngol 1962; 66:9-12.

General Practice which certifies only three years and requires graduate study for recertification. Do you remember that comment and what kind of reaction you got?

Pischel: I don't remember my comment. Certainly, the Academy didn't do anything to follow up on any suggestion if I did make it.

Hughes: Were there specific reasons behind that comment?

Pischel: I don't think there were any specific reasons, just that the group of us, probably under guidance from Bill Benedict who was running the Academy as secretary, felt that we should be sure that the members were all competent. So I think Bill Benedict deserves credit for any such improvement at that time.

Ophthalmology Courses

Hughes: Did you ever give courses or lectures through the Academy?

Pischel: Yes. I gave quite a number of courses, one course every meeting on retinal detachment work.

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Hughes: In 1940, the Academy inaugurated what it called home study courses. Again, this was part of the movement to keep ophthalmologists up-to-date. Did you have any involvement with those courses?

Pischel: No, I didn't have any involvement with those home study courses.

Hughes: They apparently were very popular and very successful.

Pischel: Yes, they were.

Hughes: I guess they led directly into the continuing education program that exists today. Did you have any concern that your residents participate in the home study courses? Or did you consider them redundant?

Pischel: No, I don't think they were redundant. We urged them to keep up their reading as much as they could, as much as they had time for. When the home study courses came, of course, it took a burden off us.

We gave lectures to the residents at the time Fred Cordes was running UC [ophthalmology] and Hans Barkan was running Stanford [ophthalmology].* We got together, and the two faculties from the two schools gave a series of evening lectures in the 1930s and forties. I think we lectured once a week, or was it twice a week? I don't remember. Men from both faculties would give these lectures so that we had, so to speak, a miniseries of lectures there.

Hughes: For whom was the course designed?

* Cordes was chairman of the UCSF department of ophthalmology from 1934 to 1959; Barkan was chairman of the division of ophthalmology, Stanford, San Francisco, from 1925 to 1950.

Pischel: This was designed for the ophthalmology residents at UC, Stanford, Fort Miley, the Veterans' Administration Hospital, and the men from Letterman [Army Hospital], and residents from anywhere could come to the lectures.

Hughes: Were they very comprehensive?

Pischel: Yes, we outlined a program so that in a year you would cover the subject of ophthalmology systematically. We figured on a two-year rotation.

Hughes: Were you attempting to include basic science as well?

Pischel: It was sort of a summary of the basic sciences, too.

Hughes: This predated the Stanford Basic Science Course in Ophthalmology?

Pischel: Yes.

Hughes: Were you involved in the debate in the sixties and seventies in splitting the Academy into the otolaryngologists and the ophthalmologists?

Pischel: All I can remember about that is that the year I was president [1960] I thought that it would not serve any useful purpose to split the society. One of the arguments was that the society was so big it swamped the facilities at a hotel. I felt that if we split the society, it would be so small that the hotels would have other meetings going on at the same time and you wouldn't have gained anything. But I was wrong: They were wise when they did split up.

Hughes: You were involved, I understand, in choosing the Las Vegas site for the Academy meetings.

Pischel: That would be a detriment to the society to be sent to Las Vegas because, as I remember, we had a good time there.

Hughes: Well, is there anything more you want to say about medical societies?

Pischel: No, I think I've said too much already.

Hughes: Was being president of these societies, generally speaking, an enjoyable experience for you?

Pischel: It was very enjoyable because, as I said before, the secretaries did all the work and you got the honor of being the president. So that part was very enjoyable, getting the honors and not having to do any real work.

Teaching Residents and Medical Students

Hughes: I would like to hear about your expectations for your residents.

Pischel: As far as the residents were concerned, in those days we were turning out what I like to call healers of the sick. We weren't turning out researchers; we were turning out men who would go into practice and cure patients of their ills if that was at all possible. So that's what we emphasized in our teaching and in what our residents were going to do after they left us.

I can say that in looking over the list of the residents that we had in the days when the medical school was in San Francisco, I'm not ashamed of any of them. I think all of them were good men, and when they went out they did a good job. Some were more energetic than others, but they all were good healers of the sick.

Hughes: Has that emphasis changed today at Stanford?

Pischel: I think they put in a lot of research down at Stanford now. Not to say that they can't cure patients, which they do very well, but they have quite an emphasis and spend a lot of time and a lot of their facilities are on research.

Hughes: Dr. Bettman told me some stories of being a resident under you: Finally being allowed to do certain cases and having your hot breath on his neck. When was a resident allowed to do a given operation?*

Pischel: Well, that varied quite appreciably. Some residents, you could tell very early that their hands were good hands, and you helped them learn how to use their hands, and then would help them with their operations. Some would be able to operate perhaps a little earlier in their career than others. [brief interruption]

Hughes: Dr. Pischel, did you like teaching?

Pischel: Yes, I liked teaching very much. That was one of the advantages of the old Stanford Medical School in San Francisco. You were not on any appreciable salary. The men who stayed with the medical school and helped with the teaching were the men who enjoyed teaching. If you enjoyed teaching, you were probably a better teacher than the man who said, "All this teaching takes me away from my laboratory; takes me away from my other work." So any school that had a voluntary faculty probably had good teachers.

Hughes: That was most faculties in the early days, was it not?

Pischel: Yes, practically all faculties were volunteer faculties.

Hughes: Would you say something about your teaching style?

Pischel: I don't think I can say anything about a teaching style. I just tried to see to it that we covered all subjects in an orderly manner so we didn't leave out some things, a big vacuum. We had these lectures for the residents, as I said, first in conjunction with UC. I've forgotten when that fell through and when UC had its own lectures. But we had lectures covering various fields, and between Dr.

* Conversation with interviewer, January 7, 1987.

Barkan and myself, we organized what we thought was a good choice of speakers on subjects in which they were especially interested so that residents would get a better teaching program that way.

Hughes: *What was the impetus for lengthening the residency from two to three years?*

Pischel: I think it probably was merely that some places like the Wilmer Institute in Baltimore just decided that they were going to have a longer residency. They actually had a peculiar type of residency; they had a five-year residency, one year of which the man spent doing what he wanted to do somewhere, either there at Hopkins or going off traveling to different places. I'm sure there was considerable influence from the Wilmer Institute in lengthening the residency to three years from two years, but I don't remember exactly what year that occurred.

Hughes: *Did the division of ophthalmology at Stanford also teach medical students?*

Pischel: Oh, yes. We lectured to the medical students. One of the highlights of our lectures, I think, was the year the faculty decided there was too much time being given to ophthalmology, and they cut out a lot of our time for lectures. The third-year students, as I remember, came to us and said they heard the eye lectures were going to be curtailed, and couldn't we give a voluntary lecture. With such a request, of course, we responded enthusiastically. We said certainly we would.

We tried to find a time in their busy schedule when we could insert another hour lecture. That year, I remember very distinctly, the only time we could find was noontime. So what happened was they would bring their lunch into the lecture hall, and we would talk to them while they were munching their very brief lunch. But it showed that the medical students, at least, appreciated our lectures which we tried to make very general to give them a background of what troubles one had with the eye, instead of going into details of how to do an operation and so forth.

Hughes: *That the medical students would want more, says something about the quality of the lectures.*

Pischel: Yes, I think so, too. We were very complimented because it wasn't just one of us who was giving all those lectures. Various men on the staff gave the lectures.

Hughes: *Elizabeth Garvin told me that at one point residents from Baylor University came through your office.**

Pischel: Yes. I've forgotten what year that was, but for four or five years the residents came up from Baylor and stayed with us for several weeks. I also have forgotten exactly how long they did stay with us. That was a compliment.

Hughes: *How did that program arise?*

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* Conversation with interviewer, January 12, 1987.

Pischel: Now my memory for names goes out the window. The head man at Baylor and I were good friends, and he asked if we would take on such a program. Of course, we were complimented. That was during Dr. Colyear's time in my office. We were very happy to have these men come up and observe what we were doing and help us with the operations.

Hughes: With emphasis on retinal detachment?

Pischel: Yes, that was what they were interested in.

Hughes: Were they assisting in the operations?

Pischel: Yes. They'd be our first assistant. If Dr. Colyear were operating alone, he'd have one of them with him. When I was operating alone, instead of Dr. Colyear helping me, the resident would help.

Hughes: Did the Stanford residents come to your office?

Pischel: No, they helped at the hospital. They saw the patients at the hospital.

Hughes: But never in your office?

Pischel: They weren't in the office. They didn't have time. They were busy out there.

Hughes: What about Oak Knoll [Naval Hospital] physicians?

Pischel: There you are. They also came to the lectures we gave to our residents.

Hughes: But not to your office?

Pischel: No.

Hughes: There's an adage that several people have told me that you lived by, and it is, "There are twenty-four hours in a day, and then there is always the night." Did you expect the same diligence of your residents?

Pischel: As a matter of fact, some of the residents did resent having to stay after supper before I could make ward rounds with them. That's not my original saying—I don't know who said that first—but that's a centuries-old saying by some good philosopher.

Hughes: But you did operate in that fashion, did you not?

Pischel: Well, that's what we had to do. If you were on the so-called voluntary faculty, you had your private practice that you had to see to and from which you earned your keep, and then you would give this additional volunteer time to the medical school. You had to give it at a time where it interfaced with your practice the least.

I can recall a meeting of former Stanford people. That was after Stanford had moved to the Farm. Somebody asked the faculty man who was up from Stanford—he wasn't an ophthalmologist; he was on the administrative end of the medical school down there—about how much time the full-timers down there actually gave to teaching. He hemmed and hawed a lot. It finally came down to, "Oh, we felt they put in twelve to fourteen hours a week on teaching." I said sotto voce, "My God, I gave more than that for nothing when I was a chief." But that, also, was a slight exaggeration.

Hughes: *Is there anything you care to say about your colleagues in the division of ophthalmology or your partners at 490 Post Street?*

Pischel: All I can say is that they had great patience putting up with my idiosyncrasies, and they were a very loyal bunch.

Hughes: *I've heard the patience went both ways, that you were an extremely patient teacher. That was a comment that Dr. Bettman made about you.**

Patients

Hughes: *Could you characterize your relationship with your patients?*

Pischel: I don't quite know what to say about my relationship with the patients. I regarded them as people whom I was trying to help. We tried to work out some way of helping each other as much as possible. I was trying to be a good healer of the sick.

I think we had a very good personal relationship. If you didn't have a good personal relationship, no patient would come back to see you. That, of course, is the trouble with some men in practice. They just don't have the right attitude of how to treat a patient, and the patient feels he's a nuisance, and so he goes somewhere else.

Hughes: *Did you consider cultivating the right attitude part of the residency training program?*

Pischel: I tried to tell them what I felt was the right way to treat a patient.

Hughes: *Presumably you were also setting an example.*

Pischel: Telling that they were there to help the patient not to patronize the patient, or to put up with them as a nuisance.

Hughes: *Dr. [Roger E.] Atkins told me that you cared for several eminent patients, one of them being the Shah of Iran.***

* Conversation with interviewer, January 7, 1987.

** Conversation with interviewer, December 9, 1986.

Pischel: No, I think that's wrong. I don't like to go into the prominent people I've treated.

Hughes: *Miss Garvin said you had many foreign visitors.* I know about Meyer-Schwickerath. Is there anybody else that springs to mind?*

Pischel: Yes. Professor Karl Lindner came and visited in San Francisco and gave us some talks there in the old Lane Hall. He was one of the leaders of the development of retinal detachment surgery. He was eventually head of the Second Eye Clinic in Vienna. The world figure, Professor Ernst Fuchs, came out and gave us a series of lectures in Lane Hall, also. So we did have some good foreigners come and speak to us. And we had good Americans come out and lecture, also.**

Hughes: *When Dr. Thygeson approached Stanford in 1946 about setting up the Proctor Foundation, do you remember any discussion at the time about the merits of having the Proctor Foundation associated with Stanford?*

Pischel: Well, there was some discussion. Hans Barkan was chief of ophthalmology at Stanford at the time. I don't think we should go into any detail unless you want to turn off the machine. [brief interruption]

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Pischel: I don't think we ought to bring up why the Proctor Foundation went to UC instead of to Stanford.

Hughes: *Dr. Thygeson has repeatedly argued against the overuse of steroids in ophthalmology. Do you have any comment to make on that subject?*

Pischel: When the steroids came in and we knew what they would do, the improvement was so dramatic that you were tempted to use steroids for anything and everything to see if it wouldn't help. So I can see Phil's point of view. He's trying to keep a proper balance and have steroids used only in cases where they are of use.

Hughes: *He maintains that he made quite a few enemies by being a bulldog on that subject.*

Pischel: I think he's quite right. [laughs] Anybody who makes definite statements is liable to tread on somebody's pet toe, but you have to make statements like that.

Prominent American Ophthalmologists

Hughes: *I understand that you knew Edward Jackson?*

* Conversation with interviewer, January 12, 1987.

** For better continuity, the discussion which follows on the tapes of the use of surgical gloves and fever therapy was incorporated in the earlier section of the transcript on the Viennese eye clinics.

Pischel: I had the privilege of meeting with Edward Jackson a number of times. He organized a course on refraction, which I helped him give in San Francisco before World War II. He was very interested, in his later years, in teaching. As he did not have a busy practice any more since he was semiretired, he had a lot of time to go around the country giving these lectures, which were very good lectures.

Hughes: Intended for anybody in ophthalmology?

Pischel: They were for the general ophthalmologist. We weren't hyper-specialists in Edward Jackson's day.

Hughes: Then what about your association with [George E.] de Schweinitz?

Pischel: Well, de Schweinitz was my father's generation. He was a wonderful gentleman. I met him, yes, as thousands of other eye doctors met de Schweinitz because he was a giant in ophthalmology in those days. He was president of the American Medical Association at one time, too, and was one of the leaders of the group of Philadelphia physicians who were so outstanding in his day.

Hughes: Are there any other Americans that should be mentioned?

Pischel: As I say, I can't remember names very well. De Schweinitz and his group there in Philadelphia were outstanding. Up in Boston, [George S.] Derby and the pathologist, Frederick C. Verhoeff, who was were certainly outstanding, had around them a very fine group of ophthalmologists.

In New York City, Arnold Knapp, in my day, was one of the leaders. He was the son of Herman Knapp, who had come over—as I think I mentioned earlier—from Heidelberg and founded the Knapp Hospital which was named, after his death, the Knapp Memorial Hospital. So there on the Atlantic Coast you had three centers where there were outstanding men.

Hughes: Did you in the West feel, in the early days, somewhat overshadowed by these established groups on the East Coast?

Pischel: I think we at Stanford felt that we were so far removed from them that there was no comparison. We were doing very well in our own right, we thought.

Ophthalmology, in those days, was somewhat different than it is now because of the fact that today you can get from New York City to San Francisco or vice versa in a few hours, but before it took four or five days. So you were more insular. The people on the East Coast were also more insular. They'd never come to the West Coast or knew that there was anything going on out here, and vice versa. As I mentioned earlier, that was the reason that the Pacific Coast Oto-Ophthalmological Society was so well received and did so much good because it helped for intercourse.

Hughes: Did the fact that the distance meant that ophthalmologists on the two coasts didn't know each other very well ever present an impediment to having a paper accepted in a journal?

Pischel: I don't think so. If the paper was good, I'm sure it was accepted.

Hughes: Did you have any particular association with the Registry of Ophthalmic Pathology in Washington?

Pischel: No, I did not. But I knew Dr. [Lorenz] Zimmerman, who built it up into a very big thing and we sent our specimens there. But after Ed Maumenee came to Stanford, we did our own pathology in a lab which Ed started.

Hughes: When did Maumenee come?

Pischel: Well, he came right after the war, it seems to me.

Hughes: Before that laboratory was established, would you as a routine send every pathology case to Washington, D.C.?

Pischel: Yes, as a routine.

There were other men, too. The Middle West was not a barren desert. For instance, at St. Louis there were some very good leaders of ophthalmology in the early days.

Hughes: Did you ever use Dr. Thygeson's services at the Proctor Foundation for the identification and treatment of eye infections?

Pischel: After he set up the lab there, we certainly did use it.

In New York, there were other people besides Arnold Knapp. At Columbia, Jack Dunnington and his predecessor, John Wheeler, were great teachers and great ophthalmologists. And the Columbia eye institute [Edward S. Harkness Eye Institute] is one of the leading eye institutes in the world.

Hughes: Would they accept pathological specimens?

Pischel: Oh, sure, they would.

Hughes: Was there a fee involved?

Pischel: Oh, I don't remember. There probably was, but it probably was infinitesimal in those days. They had a Viennese ophthalmologist, Ludwig von Sallmann, who ran their pathology laboratory in the early days there at Columbia. He came from the Second Eye Clinic in Vienna.

Hughes: Did you know him?

Pischel: Oh, yes, I knew him. I knew him in Vienna and I knew him after he moved to New York. [brief interruption]

Hughes: Do you have any comment to make about the importance of physical diagnosis in ophthalmology as opposed to relying on laboratory tests or instrumentation?

Pischel: I think physical diagnosis, in spite of all the laboratory help we have nowadays in the fancy instruments that help you find out what tissue is at fault, a physical diagnosis was and is an important part of the practice of ophthalmology.

Hughes: And one that you emphasized in the residency program?

Pischel: Yes. Don't forget that in my day we didn't have all these fancy instruments.

Hughes: Would you care to comment about the ranking of the specialties? I'm thinking particularly of the relationship of otolaryngology to ophthalmology, and how in the ophthalmologist's mind otolaryngology was often placed in an inferior position.

Pischel: Oh, I don't think we ever seriously put them in an inferior position. But with our good friends, we would joke that all otolaryngologists could do was to operate, and they didn't have to know very much to be able to operate. They were working on great big organs like the nose and the throat, where we had to be very delicate working on such a small object as the eyeball.

Hughes: Did they have a retort?

Pischel: They probably did, which would be unprintable.

Hughes: Do you have any comment to make about the relationship of ophthalmologists, optometrists, and opticians?

Pischel: Strictly speaking, the relationship of the ophthalmologist with the optician was that the optician supplied the glasses that the ophthalmologist prescribed for his patients. The optometrists have gradually increased their field of endeavor, and also increased their teaching time, so that the average graduate in optometry today is certainly better grounded than he was fifty years ago. Fifty years ago, they had no background to speak of at all.

But there certainly is a limit to the comparison of the two specialties. I don't think that opthalmologists as a whole are so inept that they have to go four years to medical school and three years to a residency before they are capable of refracting a patient. They have a background that you get only by going through medical school. You realize there's a patient as a whole surrounding the eye, and you have to know something about the background of the patient as a whole.

Hughes: Which you are, by implication, saying that the optometrist does not necessarily have.

Pischel: They don't have. They don't go through medical school.

Hughes: So they don't see the patient as a whole?

Pischel: No.

Changes and Contributions in Ophthalmology

Hughes: *Could you say something about the changes, trends, and major advances in ophthalmology during your career?*

Pischel: The most recent changes with all these various types of instruments have certainly made our diagnosis more accurate and simpler in some respects. Then the creation of certain types of instruments and certain operations were epoch-making.

In my day, the most epoch-making operation was Gonin's curing of retinal detachments by the cautery puncture. Following that, I think the next big epoch-making thing was Meyer-Schwickerath's use of light in stirring up exudate and destroying tissues inside the eye. I think that's on a par with Gonin's work. Then all the laser treatment of the eye is based on Meyer-Schwickerath's use of visible rays of light. Now, these various types of diagnosis that have gone from x-ray, as we knew it, to image resolutions and so on, are a tremendous advantage for the patient and for the doctor who is trying to cure him. In the last ten years, certainly the progress in using various instruments and various means of localizing and seeing parts of the human anatomy has just no known bounds. There's been tremendous progress in the last five years or so.

Hughes: *What aspect of your career did you enjoy most?*

Pischel: Well, being egotistical, I enjoyed being one of the leaders in retinal detachment work for many years. It's always very enjoyable when you feel you're among those who are close to the top.

Hughes: *What do you look upon as your greatest contribution?*

Pischel: My greatest contribution was picking out the right parents so I could live a long life.

Hughes: *[laughs] And if we restrict the question to ophthalmology, what would be your answer?*

Pischel: Well, I think I just had persistence enough to work out various ways of curing retinal detachment without causing undue troubles as a side issue in the eye.

I don't claim to have had any great originality at all. I just took what other people were doing and by putting two and two together came up with four instead of five or three. So I think I was a good imitator or a good collaborator, getting all the knowledge other people had painfully brought up and facts that they had found, and putting them together. So I don't claim to have made any great original contribution at all. Even the day being twenty-four hours long and the night being left for still more work is not my original quotation but comes from centuries ago.

Hughes: *Dr. Pischel, is there anything more you would like to add?*

Pischel: I can't think of anything more to add. It's a monumental job that you have undertaken to get a good history of the development of ophthalmology.

Hughes: I thank you.

##

Dohrmann Kaspar Pischel
1985

TAPE GUIDE — Dohrmann Kaspar Pischel

APPENDICES

Dr. Pischel's Curriculum Vitae and Bibliography were obtained from his former office in San Francisco where his private practice was located for over fifty years. Significantly, in view of his modesty and distaste for academic self-aggrandizement, he did not have copies of either document at home. The Curriculum Vitae and Bibliography are reproduced in Dr. Pischel's original format except for the addition of ten references to his bibliography, which the interviewer discovered while preparing for the interviews. Therefore, both the Curriculum Vitae and Bibliography remain incomplete.

Oct. 1974

Dohrmann Kaspar Pischel, M.D.

Office address: *490 Post Street*
San Francisco, California 94102
Home address: *1801 Broadway*
San Francisco, California 94109
Born: November 22, 1895
San Francisco, California

Father's name: Kaspar Pischel
Mother's name: Minna Dohrmann

Wife's name: Margery Lovegrove
Married: June 7, 1923

Children: Dohrmann Kaspar Jr.,
Elinore (Mrs. Peter McAndrew),
Elizabeth (Mrs. Ivan Heisler)

Education: Grade school, San Francisco
Preparatory school, Cate School for Boys, Carpenteria, California
A.B. at University of California, Berkeley, California, 1918.
M.D. at Stanford University, 1923.

Internship: Lane-Stanford Hospital, San Francisco, California, 1922-23.

Residency: Served as Hospitant at the First University Eye Clinic, University of Vienna, Austria, 1924-26.

Practice: Ophthalmology, San Francisco, 1926-present.

Clinical Instructor of Ophthalmology, University of California,San Francisco, 1926-28
Clinical Instructor of Ophthalmology, Stanford University School of Medicine, 1928-35

Assistant Professor of Ophthalmology, Stanford University School of Medicine, 1935-45

Associate Professor of Ophthalmology, Stanford University School of Medicine, 1945-55

Professor, Head, Division of Ophthalmology, Stanford University School of Medicine, 1955-58

Professor of Ophthalmology, Emeritus, Stanford Medical School, 1959-present

Past chief consultant in ophthalmology, San Francisco Hospital

Past consultant in ophthalmology, Veterans Hospital, San Francisco

Teaching Faculty: American Academy of Ophthalmology and Otolaryngology

Certified: American Board of Ophthalmology, 1927.

License: California, 1923. OOA-03498

Special Ophthalmological Interest: Retina detachments

Honor Societies: Sigma Xi

Diplomate: American Board of Ophthalmology

Board of Directors: National Society for the Prevention of Blindness, 1960-70

Member of Staff: Children's Hospital, San Francisco (Active)
Hahnemann Hospital, San Francisco
Pacific Medical Center, San Francisco (Active)
St. Mary's Hospital and Medical Center, San Francisco (Courtesy)

Clubs: Bohemian Club, San Francisco
Lagunitas Club, Ross, California

Medical Societies: San Francisco County Medical Society (Chairman, Section of Ophthalmology, 1930)

California Medical Association (Chairman,Ophthalmology Section, 1946)

American Academy of Ophthalmology and Otolaryngology (President, 1960)

Pacific Coast Oto-Ophthalmological Society (President, 1960)

American Medical Association (Chairman, Section of Ophthalmology, 1958)

American Ophthalmological Society (President,1971) and (Recipient of Howe Medal, 1966)

Northwestern Medical Association

Pan-Pacific Surgical Association

Pan American Ophthalmological Society

Société Française d'Ophtalmologie

International Council of Ophthalmology (Vice-President, 1964-68)

The Retina Society of America

The Gonin Club

New Zealand Ophthalmological Society (honorary member)

Australian Ophthalmological Society (honorary member)

THE PISCHEL MEDICAL GROUP, INC.
Dohrmann K. Pischel, M.D.
Roger E. Atkins, M.D.
Thomas S. Ferguson, M.D.
490 Post Street, Suite 1440
San Francisco, CA 94102
(415) 392-6625

August 14, 1985

LIST OF PUBLICATIONS*

1) Preferential Procedures for Retinal Detachment Problems
American Academy of Ophthalmology, 1972
2) How to Avoid Complicated Operations
Modern Problems in Ophthalmology, 1968
3) The Risk of Untreated Retinal Holes
Modern Problems in Ophthalmology, 1966
4) Review of 100 Cases of Retinal Detachment
American Journal of Ophthalmology, 1948, 31:796-804
5) Longterm Aspects of Encircling Operations in the Treatment of Retinal Detachment
Transactions of the P.C.O.O. Society, 1967
6) Prophylaxis as Regards Retinal Detachments
XVIII Concilium Ophthalmologicum, 1958
7) Modification of Barraquer Operating Microscope for Vitreous Surgery
American Academy of Ophthalmology-Chicago, 1967
8) Three Brothers with Juvenile Retinoschisis
Modern Problems in Ophthalmology, 1969
9) Symposium on Retinal Detachment
Trans. Pacific Coast, 1962
10) Causes of Failure in Retinal Detachment Surgery
AMA, August, 1956
11) Treatment of Retinal Detachments (Symposium: Retinal Detachment)
Trans. Am. Academy, May-June, 1952
12) Symposium: Photocoagulation
Jan.-Feb., 1962
13) Photocoagulation as an Adjunct in Retinal Detachment Surgery
AJO Oct., 1961
14) Complications of Light Coagulation Therapy
CMA April, 1962
15) Clinical Results of Light Coagulation Therapy
AJO Oct., 1960

* Reproduced in Dr. Pischel's original format except for final ten references which were added by the interviewer.

16) The Use of Scleral Transplants in the Treatment of Retinal Detachment
P.C.O.O.S. 1967

17) Malignant Melanoblastomas of the Choroid-Results of Treatment
Modern Problems of Ophthalmology, 1968

18) Detachment of the Vitreous as Seen by Slit-Lamp Examination: with Notes on the Technique of Slit-Lamp Microscopy of the Vitreous Cavity
AJO Nov., 1953

19) Photocoagulation Treatment of Retinoschisis
Trans. Ophthalmological Society, 1965

20) The Time Interval in the Development of Lattice Degeneration of the Retina
AJO May, 1966

21) Retinal Detachments after the Use of Phospholine Iodide
Trans. Pacific Coast, 1966

22) Some Problems Facing the Academy (Address of the President)
American Academy of Ophthalmology & Oto., 1961

23) Tattooing of the Cornea with Gold and Platinum Chloride
Arch. Ophthalmol., 3(1930):176-81

24) Glaucosan in Glaucoma
Amer. Journal of Ophthal., 1928

25) The Organoluetin Reaction in the Diagnosis of Interstitial Keratitis
Archives of Ophthalmology, 1927

26) Late Results in Retinal Detachment Operations
American Journal of Ophthalmology, 1939, 22:130-134

27) Retinal Detachment Cured by an Eyeball-shortening Operation: Report of a Case
Archives of Ophthalmology, 1939, 22:974-979.

28) Pischel and B.H. Colyear, Jr. Clinical Fears in the Retina without Detachment
AJO, 1956, 41:773-792

29) Pischel and Colyear. Clinical Results of Light Coagulation Therapy
Pacific Coast Oto-Ophthal. Society, 1959, 40:63-71

30) Colyear and Pischel. Preventative Treatment of Retinal Detachment by Means of Light Coagulation
Trans. Pacific Coast Oto-Ophthal. Society, 1960, 41:193-214

31) Colyear and Pischel. Complications of Light Coagulation Therapy
AJO 1963, 55:773-781

32) Pischel. Present Status of Retinal Detachment Operations
Trans. P.C.O.O.S., 1933, 21st Annual Meeting, 114.

Zeugniss

50 kr

Herr Doctor med. univ. Caspar Pischl hat vom 25. November 1886 bis 7 April 1887 auf der k. Universitäts-Augenklinik des Gefertigten als Aspirant gedient und sich hiebei durch ausdauernden Fleiss, theoretisches und practisches Geschick so wie durch kunstgerechtes Krankenbehandeln ausgezeichnet. Er wird hiemit auf das beste empfohlen.

Wien 7 April 1887

Prof. Stellwag

K.K. UNIVERSITÄTS=
[A]UGENKLINIK
PROF. STELLWAG v. CARION

TESTIMONY

Mister Doctor Med. Univ. Caspar Pischl has served as candidate, "Aspirant", from 25 November 1886 until 7 April 1887 in the First University Eye Clinic of the undersigned and distinguished himself through persistent diligence, theoretical and practical ability, as well as exemplary behavior. He is highly recommended to everyone.

Vienna, 7 April 1887

Prof. Dr. Stellwag
von Carion

UNIVERSITÄT ZU WIEN

MEDIZINISCHE FAKULTÄT

ZEUGNIS

Der Dekan der Medizinischen Fakultät in Wien bestätigt hiermit, dass

Herr Dohrmann Kaspar Pischel, A.B., M.D.

San Francisco, Calif.

auf Grundlage eines Doktordiploms

Stanford University School of Medicine 1923

an der Medizinischen Fakultät der Wiener Universität inskribiert war und während

der Zeit vom 31. März 1924 bis zum 15. November 1925
27. Februar 1926 — 19. März 1926

die unten genannten Vorlesungen, klinischen und operativen Kurse regelmäßig besucht hat.

Spaltlampenkurs [illegible]	[illegible]
[illegible] u. [illegible], Bakteriologie	Prof. Dr. K. Lindner
[illegible]	[illegible]
Diagnose & Therapie Hals Nase.	Dr. Gustav Hofer Wien
Augenmuskellähmungen	Dr. [illegible]
Histopathologie der Augen	Dr. A. Fuchs
Anatomie & Pathologie der ob. Luftwege	[illegible]
[illegible] Erkrankungen	[illegible]
Ophthalmoskopie.	Arnold Pillat.
[illegible]	Dr. Josef [illegible]
Nasen-Halsoperationen an der Leiche	Dozent Dr. Karl Kofler

Wien, den March 24th 1926.

[illegible signature]

d. Z. Dekan der Medizinischen Fakultät.

UNIVERSITY OF VIENNA
DEPARTMENT OF MEDICINE

DIPLOMA

The Dean of the Faculty of Medicine in Vienna hereby certifies that Mr. Dohrmann Kaspar Pischel, A.B., M.D., San Francisco, Calif., on the basis of a degree from Stanford University School of Medicine, 1923, was enrolled in the Department of Medicine of Vienna University and during the time from March 31, 1924 until November 15, 1925 and from February 27, 1926 until March 19, 1926 has regularly attended the below named lectures, clinical work and surgical courses.

Slit Lamp Course, Redfree Light	?
Retinoscopy, Bacteriology	Prof. Dr. K[arl] Lindner
?	Professor Dr. ?
Diagnosis and Treatment of Throat & Nose	Dr. O. Gustav Hofer, Vienna
Palsies of Extraocular Muscles	Docent Dr. E. Bachstez
Histopathology of the Eye	Dr. A[dalbert] Fuchs
Anatomy and Pathology of the Upper Respiratory Tract	Docent Dr. Oskar Hirsch
External Eye Diseases	Gustav Guist
Ophthalmoscopy	Dr. Arnold Pillat
?	Ass. Dr. Josef Urbanek
Nose-Throat Operations on the Cadaver	Docent Dr. Karl Kofler

Vienna, March 24th, 1926

Dean of the School of Medicine

CHRONOLOGY

Pacific Presbyterian Medical Center
Department of Ophthalmology

Composed by Jerome W. Bettman, MD

1873	The department of ophthalmology of the Medical Department of the University of the Pacific was founded.
1873-1911	Adolph Barkan was the first professor and chairman of eye, ear, nose and throat.
1872	The Medical Department of the University of the Pacific severed connections with the University of the Pacific, becoming the Medical College of the Pacific.
1882	The Medical College of the Pacific became Cooper Medical College.
1908	Cooper Medical College became Stanford Medical School.
1909	Albert McKee became professor of the division of ophthalmology at Stanford Medical School.
1911	Adolph Barkan became emeritus and lived in Switzerland until his death.
1911-28	Albert McKee was chairman of the division of ophthalmology.
1928-48	Hans Barkan became chairman of the division.
1948-55	Alfred Edward Maumenee was chairman until he left to head the Wilmer Institute.
1955-58	Dohrmann Kaspar Pischel was chairman.
1958-66	Jerome W. Bettman was chairman.
1959	Stanford moved its medical school to Palo Alto and the facilities which had belonged to Stanford became the Pacific Medical Center. The division of ophthalmology became a department at Pacific Medical Center.
1966-67	Arthur J. Jampolsky was chairman.
1971-87	Bruce E. Spivey was chairman.
1985	Pacific Medical Center became Pacific Presbyterian Medical Center.
1987-	Robert L. Stamper is chairman.

INTERVIEWER BIOGRAPHY

Sally Smith Hughes

She graduated from the University of California, Berkeley, in 1963 with an A.B. degree in zoology, and from the University of California, San Francisco, in 1966 with an M.A. degree in anatomy. After completing a dissertation on the history of the concept of the virus, she received a Ph.D. degree in the history of medicine from the Royal Postgraduate Medical School, University of London, in 1972.

Her previous positions have been postgraduate research histologist, the Cardiovascular Research Institute, University of California, San Francisco, 1966-1968, and medical historian conducting the NEH-supported History of Medical Physics Project for The Bancroft Library, 1978-1980.

She is presently an interviewer on medical and scientific topics for the Regional Oral History Office. The author of The Virus: A History of the Concept, she is currently writing a book on the early history of nuclear medicine.

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The Foundation of the
American Academy of Ophthalmology